STAPLED PEPTIDES AND METHODS THEREOF

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to United States Provisional Application Nos. 63/055,308, filed July 22, 2020, and 63/208,494, filed June 08, 2021, the entirety of each of which is incorporated herein by reference.

BACKGROUND

[0002] Stapled peptides are useful for various applications. For example, as biologically active agents, they can be utilized to modulate various biological functions.

SUMMARY

[0003] Among other things, the present disclosure provides powerful technologies (e.g., agents (e.g., those that are or comprise peptides, in many embodiments, stapled peptides), compositions, methods, etc.) for modulating various biological functions. In some embodiments, provided technologies comprise designed structural features, e.g., novel amino acid residues, that can provide significantly improved properties and/or activities compared to comparable reference technologies that do not contain such designed structural features. In some embodiments, the present disclosure provides designed amino acids as described herein, whose incorporation into peptide agents, including stapled peptides, can provide significantly improved properties and/or activities such as improved lipophilicity and/or delivery into cells compared to reference amino acids (e.g., Asp). In some embodiments, the present disclosure provides technologies including peptides comprising such designed amino acid residues. In some embodiments, the present disclosure provides stapled peptides comprise such designed amino acid residues.

[0004] In some embodiments, the present disclosure provides technologies for modulating one or more functions of beta-catenin. Particularly, in some embodiments, the present disclosure provides various peptides, in many instances stapled peptides, that can bind to beta-catenin. Particularly, in some embodiments, the present disclosure provides various agents, e.g., peptides, in many instances stapled peptides, that can bind to beta-catenin and modulate its functions. As demonstrated herein, in some embodiments, the present disclosure binds agents that can interact with beta-catenin at a unique set of residues. In some embodiments, a binding site comprises one or more or all of the set of residues. In some embodiments, provided agents interact with one or more of a set of residues that are or correspond to the following residues of SEQ ID NO: 1: A305, Y306, G307, N308, Q309, K312, R342, K345, V346, V349, Q375, R376, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419. In

some embodiments, provided agents interact with one or more of amino acid residue that are or correspond to A305, Y306, G307, N308, Q309, K312, R342, K345, V346, V349, Q375, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419 of SEQ ID NO: 1. In some embodiments, provided agents interact with one or more of amino acid residues that are or correspond to A305, Y306, G307, N308, Q309, K312, K345, V346, V349, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419 of SEQ ID NO: 1. In some embodiments, provided agents interact with one or more of amino acid residues that are or correspond to G307, K312, K345, W383, N387, D413, and N415 of SEQ ID NO: 1. In some embodiments, provided agents interact with one or more of amino acid residues that are or correspond to K312, K345, R386 and W383 of SEQ ID NO: 1. In some embodiments, provided agents interact with one or more of amino acid residues that are or correspond to K312, K345 and W383 of SEQ ID NO: 1.

[0005] As demonstrated herein, provided technologies can modulate one or more biological processes associated with beta-catenin. In some embodiments, provided agents compete with a ligand for a particular binding site (e.g., with a member of the T cell factor/lymphoid enhancer factor (TCF/LEF) family of transcription factors at the TCF site on beta-catenin). In some embodiments, provided technologies compete with TCF for interactions with beta-catenin. In some embodiments, binding of provided agents to a beta-catenin site decreases, suppresses and/or blocks binding to beta-catenin by another binding partner (e.g., a kinase). In some embodiments, binding of provided agents, e.g., at a TCF site, blocks binding of beta-catenin by a TCF/LEF family member. In some embodiments, the present disclosure provides agents that can bind to a site of beta-catenin, e.g., a TCF binding site of beta-catenin, selectively over one of more other potential binding sites of beta-catenin (e.g., for other ligands such as peptides, proteins, etc.; in some embodiments, a ligand is Axin; in some embodiments, a ligand is Bcl9). In some embodiments, provided technologies modulate one or more beta-catenin functions associated with its interactions with TCF. In some embodiments, provided technologies selectively modulate beta-catenin functions, e.g., functions associated with TCF interactions. In some embodiments, provided technologies selectively modulate beta-catenin functions and do not significantly impact functions that are not associated with beta-catenin (e.g., various functions and/or processes in the Wnt pathway that are not associated with beta-catenin). In some embodiments, provided technologies are useful for inhibiting beta-catenin functions. In some embodiments, provided technologies are usefully for promoting and/or enhancing immune activities, e.g., anti-tumor adaptive immunity.

[0006] In some embodiments, provided technologies are useful for preventing or treating various conditions, disorders or diseases including cancer. In some embodiments, the present disclosure provides methods for treating or preventing a condition, disorder or disease associated with beta-catenin, comprising administering to a subject suffered therefrom or susceptible thereto an effective amount of a

provided agent or a pharmaceutically acceptable salt thereof. In some embodiments, a condition, disorder or disease is associated with beta-catenin's interactions with TCF. In some embodiments, an agent, e.g., a staple peptide, is administered as a pharmaceutical composition. In some embodiments, the present disclosure provides pharmaceutical compositions which comprise or deliver a provided agent or a pharmaceutically acceptable salt thereof. In some embodiments, a pharmaceutical composition further comprises a lipid. As demonstrated herein, in some embodiments, a suitable lipid can promote delivery/activities. In some embodiments, an agent is or comprises a peptide. In some embodiments, an agent is or comprises a stapled peptides. In some embodiments, provided agents that can bind beta-catenin comprise one or more designed amino acid residues.

[0007] In some embodiments, the present disclosure provides agents that bind to a polypeptide comprising or consisting of SEQ ID NO: 1 (Uniprot ID P35222), or residues 250-450 of SEQ ID NO: 1, or residues 305-419 of SEQ ID NO: 1:

Uniprot No. P35222

MATQADLMELDMAMEPDRKAAVSHWQQQSYLDSGIHSGATTTAPSLSGKGNPEEEDVDTS
QVLYEWEQGFSQSFTQEQVADIDGQYAMTRAQRVRAAMFPETLDEGMQIPSTQFDAAHPT
NVQRLAEPSQMLKHAVVNLINYQDDAELATRAIPELTKLLNDEDQVVVNKAAVMVHQLSK
KEASRHAIMRSPQMVSAIVRTMQNTNDVETARCTAGTLHNLSHHREGLLAIFKSGGIPAL
VKMLGSPVDSVLFYAITTLHNLLLHQEGAKMAVRLAGGLQKMVALLNKTNVKFLAITTDC
LQILAYGNQESKLIILASGGPQALVNIMRTYTYEKLLWTTSRVLKVLSVCSSNKPAIVEA
GGMQALGLHLTDPSQRLVQNCLWTLRNLSDAATKQEGMEGLLGTLVQLLGSDDINVVTCA
AGILSNLTCNNYKNKMMVCQVGGIEALVRTVLRAGDREDITEPAICALRHLTSRHQEAEM
AQNAVRLHYGLPVVVKLLHPPSHWPLIKATVGLIRNLALCPANHAPLREQGAIPRLVQLL
VRAHQDTQRRTSMGGTQQQFVEGVRMEEIVEGCTGALHILARDVHNRIVIRGLNTIPLFV
QLLYSPIENIQRVAAGVLCELAQDKEAAEAIEAEGATAPLTELLHSRNEGVATYAAAVLF
RMSEDKPQDYKKRLSVELTSSLFRTEPMAWNETADLGLDIGAQGEPLGYRQDDPSYRSFH
SGGYGQDALGMDPMMEHEMGGHHPGADYPVDGLPDLGHAQDLMDGLPPGDSNQLAWFDTD
L (SEQ ID NO: 1)

[0008] In some embodiments, provided agents specifically interact with one or more residues which are or correspond to residues 305-419 of SEQ ID NO: 1. In some embodiments, provided agents specifically bind to a motif (e.g., a portion of a polypeptide, a domain of a polypeptide, etc.) that comprise one or more residues corresponding to Ala305, Tyr306, Gly307, Asn 308, Gln309, Lys312, Arg342, Lys345, Val346, Val349, Gln375, Arg376, Gln379, Asn380, Leu382, Trp383, Arg386, Asn387, Asp413, Asn415, Val416, Thr418, and Cys419 of SEQ ID NO: 1. In some embodiments, provided agents specifically bind to a motif (e.g., a portion of a polypeptide, a domain of a polypeptide, etc.) that comprise

one or more residues corresponding to Ala305, Tyr306, Gly307, Asn 308, Gln309, Lys312, Lys345, Val346, Val349, Gln375, Arg376, Gln379, Asn380, Leu382, Trp383, Arg386, Asn387, Asp413, Asn415, Val416, Thr418, and Cys419 of SEQ ID NO: 1. In some embodiments, an agent binds to a motif comprising one or more of the following residues within SEQ ID NO: 1: Ala305, Tyr306, Gly307, Asn 308, Gln309, Lys312, Arg342, Lys345, Val346, Val349, Gln375, Arg376, Gln379, Asn380, Leu382, Trp383, Arg386, Asn387, Asp413, Asn415, Val416, Thr418, and Cys419. In some embodiments, an agent specifically binds to a motif comprising one or more of the following residues within SEQ ID NO: 1: Ala305, Tyr306, Gly307, Asn 308, Gln309, Lys312, Lys345, Val346, Val349, Gln375, Arg376, Gln379, Asn380, Leu382, Trp383, Arg386, Asn387, Asp413, Asn415, Val416, Thr418, and Cys419. In some embodiments, an agent binds to a motif comprising one or more of the following residues within SEQ ID NO: 1: Ala305, Tyr306, Gly307, Asn 308, Gln309, Lys312, Arg342, Lys345, Val346, Val349, Gln 375, Gln379, Asn380, Leu382, Trp383, Arg386, Asn387, Asp413, Asn415, Val416, Thr418, and Cys419. In some embodiments, an agent binds to a motif comprising one or more of the following residues within SEQ ID NO: 1: Ala305, Tyr306, Gly307, Asn 308, Gln309, Lys312, Lys345, Val346, Val349, Gln379, Asn380, Leu382, Trp383, Arg386, Asn387, Asp413, Asn415, Val416, Thr418, and Cys419. In some embodiments, provided technologies bind to a motif comprising at least 2, 3, 4, 5, 6, or 7 of G307, K312, K345, W383, N387, D413, and N415. In some embodiments, provided agents specifically bind to such motifs. In some embodiments, a motif may be referred to as a binding site. In some embodiments, provided technologies selectively bind to such a binding site over an Axin binding site. In some embodiments, provided technologies selectively bind to such a binding site over a Bcl9 binding site. In some embodiments, provided technologies selectively bind to such a binding site over a TCF binding site. In some embodiments, provided technology binds to such a binding site in a reverse N to C direction compared to TCF. In some embodiments, provided technologies do not bind to Axin binding site of beta-catenin. In some embodiments, provided technologies do not bind to Bcl9 binding site of beta-catenin. Various technologies, e.g., crystallography, NMR, biochemical assays, etc., may be utilized to assess interactions with beta-catenin in accordance with the present disclosure.

[0009] In some embodiments, there are two amino acid residues between two amino acid residues bonded to the same staple. Such a staple may be referred to as a (i, i+3) staple. Similarly, in some embodiments, there are 3, 4, 5, 6, 7, 8, 9, or 10 amino acid residues between two amino acid residues bonded to the same staple, and such a staple may be referred to as a (i, i+4), (i, i+5), (i, i+6), (i, i+7), (i, i+8), (i, i+9), (i, i+10), or (i, i+11) staple, respectively. In some embodiments, a staple is (i, i+3). In some embodiments, a staple is (i, i+4). In some embodiments, a staple is (i, i+7). In some embodiments, there are two staples in a provided agent. In some embodiments, one staple is (i, i+3) and the other is (i, i+7).

[0010] In some embodiments, the present disclosure provides an agent of formula I:

$$R^N–L^{P1}–L^{AA1}–L^{P2}–L^{AA2}–L^{P3}–L^{AA3}–L^{P4}–L^{AA4}–L^{P5}–L^{AA5}–L^{P6}–L^{AA6}–L^{P7}–R^C,$$

I

or a salt thereof, wherein each variable is independently as described herein.

[0011] In some embodiments, the present disclosure provides an agent which is or comprises:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13},$$

wherein:

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, and X^{13} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group; and

X^{13} comprises a side chain comprising an optionally substituted aromatic group.

[0012] In some embodiments, the present disclosure provides an agent which is or comprises:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group; and

X^{13} comprises a side chain comprising an optionally substituted aromatic group.

[0013] In some embodiments, the present disclosure provides an agent which is or comprises:

$$[X]pX^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}[X]p';$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of p and p' is independently 0-10;

each of X, X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group; and

X^{13} comprises a side chain comprising an optionally substituted aromatic group.

[0014] In some embodiments, an agent is $[X]pX^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}[X]p'$. In some embodiments, an agent is R^N–$[X]pX^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}[X]p'$–$R^C$.

[0015] In some embodiments, the present disclosure provides an agent which is or comprises:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group; and

X^{13} comprises a side chain comprising an optionally substituted aromatic group.

[0016] In some embodiments, an agent is or comprises a peptide. In some embodiments, an agent is or comprises a stapled peptide. In some embodiments, X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or are stapled, X^3 and X^{10} independently amino acid residues suitable for stapling, or are stapled, X^1 and X^4, and/or X^{10} and X^{14} are independently amino acid residues suitable for stapling, or are stapled, or X^1 and X^4, and/or X^7 and X^{14} are independently amino acid residues suitable for stapling, or are stapled. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are stapled. In some embodiments, X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^4 and X^{11} are stapled. In some embodiments, X^{10} and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^{10} and X^{14} are stapled. In some embodiments, X^7 and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^7 and X^{14} are stapled. In some embodiments, X^1 and X^4, and X^{10} and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are stapled, and X^{10} and X^{14} are stapled. In some embodiments, X^1 and X^4, and X^7 and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are stapled, and X^7 and X^{14} are stapled. In some embodiments, X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, a stapled peptide is a stitched peptide comprising two or more staples, some of which may bond to the same backbone atom. In some embodiments, X^1 and X^4 are stapled, and X^4 and X^{11} are stapled. In some embodiments, a staple connecting X^1 and X^4 and a staple connecting X^4 and X^{11} are bonded to a common

backbone atom of X^4. In some embodiments, a common backbone atom is the alpha-carbon of X^4. In some embodiments, X^3 and X^{10} are independently amino acid residues suitable for stapling. In some embodiments, X^3 and X^{10} are stapled.

[0017] In some embodiments, the present disclosure provides agents that bind to a polypeptide comprising or consisting of residues 305-419 of SEQ ID NO: 1. In some embodiments, an agent has a molecular mass of no more than about 5000 Daltons. In some embodiments, it is no more than about 2500, 3000, 3500, 4000, 4500 or 5000 Daltons. In some embodiments, it is no more than about 2500 Daltons. In some embodiments, it is no more than about 3000 Daltons. In some embodiments, it is no more than about 3500 Daltons. In some embodiments, it is no more than about 4000 Daltons. In some embodiments, it is no more than about 500 Daltons.

[0018] In some embodiments, the present disclosure provides various reagents and methods associated with provided agents including, for example, reagents and/or systems for identifying, characterizing and/or assessing them, strategies for preparing them, and various diagnostic and therapeutic methods relating to them.

[0019] In some embodiments, the present disclosure provides pharmaceutical compositions comprising or delivering a provided agent and a pharmaceutical acceptable carrier. In some embodiments, a provided agent is a pharmaceutically acceptable salt form. In some embodiments, a provided composition comprises a pharmaceutically acceptable salt form an agent. In some embodiments, in various compositions and methods, agents are provided as pharmaceutically acceptable salt forms.

[0020] In some embodiments, the present disclosure provides methods for modulating a property, activity and/or function of beta-catenin, comprising contacting beta-catenin with a provided agent. In some embodiments, the present disclosure provides methods for modulating a property, activity and/or function of beta-catenin in a system comprising beta-catenin, comprising administering to a system an effective amount of a provided agent. In some embodiments, the present disclosure provides methods for modulating a property, activity and/or function of beta-catenin in a system expressing beta-catenin, comprising administering or delivering to a system an effective amount of a provided agent. In some embodiments, an activity of beta-catenin is inhibited or reduced. In some embodiments, a function of beta-catenin is inhibited or reduced. In some embodiments, a property, activity and/or function is associated with beta-catenin/TCF interaction.

[0021] In some embodiments, the present disclosure provides methods for modulating beta-catenin/TCF interaction. In some embodiments, the present disclosure provides methods for modulating beta-catenin/TCF interaction, comprising contacting beta-catenin with a provided agent. In some embodiments, the present disclosure provides methods for modulating beta-catenin/TCF interaction in a

system comprising beta-catenin and TCF, comprising administering or delivering to the system an effective amount a provided agent. In some embodiments, the present disclosure provides methods for modulating beta-catenin/TCF interaction in a system expressing beta-catenin and TCF, comprising administering or delivering to the system an effective amount a provided agent. In some embodiments, interactions between beta-catenin and TCF is reduced. In some embodiments, interactions between beta-catenin and TCF is inhibited.

[0022] In some embodiments, the present disclosure provides methods for inhibiting cell proliferation, comprising administering or delivering to a population of cells an effective amount of a provided agent. In some embodiments, the present disclosure provides methods for inhibiting cell proliferation in a system, comprising administering or delivering to the system an effective amount of a provided agent. In some embodiments, the present disclosure provides methods for inhibiting cell growth, comprising administering or delivering to a population of cells an effective amount of a provided agent. In some embodiments, the present disclosure provides methods for inhibiting cell growth in a system, comprising administering or delivering to the system an effective amount of a provided agent. In some embodiments, such cell proliferation is beta-catenin dependent. In some embodiments, such cell growth is beta-catenin dependent. In some embodiments, such proliferation or growth is dependent on beta-catenin interactions with TCF.

[0023] In some embodiments, the present disclosure provides methods for reducing or preventing activation of a WNT pathway. In some embodiments, the present disclosure provides methods for reducing or preventing activation of a WNT pathway in a system, comprising administering or delivering to the system an effective amount of a provided agent.

[0024] In some embodiments, a system is *in vitro*. In some embodiments, a system is *ex vivo*. In some embodiments, a system is *in vivo*. In some embodiments, a system is or comprise a cell. In some embodiments, a system is or comprises a tissue. In some embodiments, a system is or comprises an organ. In some embodiments, a system is or comprises an organism. In some embodiments, a system is an animal. In some embodiments, a system is human. In some embodiments, a system is or comprises cells, tissues or organs associated with a condition, disorder or disease. In some embodiments, a system is or comprises cancer cells.

[0025] In some embodiments, the present disclosure provides methods for preventing conditions, disorders or diseases. In some embodiments, the present disclosure provides methods for reducing risks of conditions, disorders or diseases. In some embodiments, the present disclosure provides methods for preventing a condition, disorder or disease, comprising administering or delivering to a subject susceptible thereto an effective amount of an agent of the present disclosure. In some embodiments, the present disclosure provides methods for reducing risk of a condition, disorder or disease, comprising

administering or delivering to a subject susceptible thereto an effective amount of an agent of the present disclosure. In some embodiments, the present disclosure provides methods for reducing risks of a condition, disorder or disease in a population, comprising administering or delivering to a population of subjects susceptible thereto an effective amount of an agent of the present disclosure. In some embodiments, the present disclosure provides methods for treating conditions, disorders or diseases. In some embodiments, the present disclosure provides methods for treating a condition, disorder or disease, comprising administering or delivering to a subject suffering therefrom an effective amount of an agent of the present disclosure. In some embodiments, a symptom is reduced, removed or prevented. In some embodiments, one or more parameters for assessing a condition, disorder or disease are improved. In some embodiments, survival of subjects are extended. As appreciated by those skilled in the art, in some embodiments, prevention, reduced risks, and/or effects of treatment may be assessed through clinical trials and may be observed in subject populations. In some embodiments, a condition, disorder or disease is cancer. In some embodiments, a condition, disorder or disease is associated with beta-catenin. In some embodiments, a condition, disorder or disease is associated with beta-catenin interaction with TCF. In some embodiments, a condition, disorder or disease is bladder cancer. In some embodiments, a condition, disorder or disease is endometrial cancer. In some embodiments, a condition, disorder or disease is adrenocortical carcinoma. In some embodiments, a condition, disorder or disease is gastric cancer. In some embodiments, a condition, disorder or disease is lung cancer. In some embodiments, a condition, disorder or disease is melanoma. In some embodiments, a condition, disorder or disease is esophageal cancer. In some embodiments, a condition, disorder or disease is colorectal cancer. In some embodiments, a cancer is liver cancer. In some embodiments, a cancer is prostate cancer. In some embodiments, a cancer is breast cancer. In some embodiments, a cancer is endometrial cancer.

[0026] In some embodiments, agents are administered as pharmaceutically compositions that comprise or deliver such agents. In some embodiments, agents are provided and/or delivered in pharmaceutically acceptable salt forms. In some embodiments, in a composition (e.g., a liquid composition of certain pH) an agent may exist in various forms including various pharmaceutically acceptable salt forms.

[0027] In some embodiments, a provided agent is utilized in combination with a second therapy. In some embodiments, a provided agent is utilized in combination with a second therapeutic agent. In some embodiments, a second therapy or therapeutic agent is administered prior to an administration or delivery of a provided agent. In some embodiments, a second therapy or therapeutic agent is administered at about the same time as an administration or delivery of a provided agent. In some embodiments, a second therapy or therapeutic agent is administered subsequently to an administration or delivery of a provided agent. In some embodiments, a subject is exposed to both a provided agent and a second therapeutic

agent. In some embodiments, a subject is exposed to a therapeutic effect of a provided agent and a therapeutic effect of a second therapeutic agent. In some embodiments, a second therapy is or comprises surgery. In some embodiments, a second therapy is or comprises radiation therapy. In some embodiments, a second therapy is or comprises immunotherapy. In some embodiments, a second therapeutic agent is or comprises a drug. In some embodiments, a second therapeutic agent is or comprises a cancer drug. In some embodiments, a second therapeutic agent is or comprises a chemotherapeutic agent. In some embodiments, a second therapeutic agent is or comprises a hormone therapy agent. In some embodiments, a second therapeutic agent is or comprises a kinase inhibitor. In some embodiments, a second therapeutic agent is or comprises a checkpoint inhibitor (e.g., antibodies against PD1-, PD-L1, CTLA-4, etc.). In some embodiments, a provide agent can be administered with lower unit dose and/or total dose compared to being used alone. In some embodiments, a second agent can be administered with lower unit dose and/or total dose compared to being used alone. In some embodiments, one or more side effects associated with administration of a provided agent and/or a second therapy or therapeutic agent are reduced. In some embodiments, a combination therapy provides improved results, e.g., when compared to each agent utilized individually. In some embodiments, a combination therapy achieves one or more better results, e.g., when compared to each agent utilized individually.

[0028] Further description of certain embodiments of these aspects, and others, of the present disclosure, is presented below.

BRIEF DESCRIPTION OF THE DRAWING

[0029] Fig. 1. Provided agents can modulate gene expression in cells. As demonstrated herein, provided peptides can effectivley reduce expression of various nucleic acids such as Axin2 and Myc. For each gene, from left to right: I-796, I-849, and I-922.

[0030] Fig. 2. Provided technologies do not significantly impact expression of various beta-catenin-independent genes including various beta-catenin-independent WNT target genes such as PLOD2 and LCOR. For each gene, from left to right: I-796, I-849, and I-922.

[0031] Fig. 3. Provided technologies can effectively modulate expression. As shown in a report assay (I-849: square; I-922: triangle), provided peptides can effectively reduce expression compared to a control peptide I-796 (circle).

DETAILED DESCRIPTION OF CERTAIN EMBODIMENTS

Definitions

[0032] As used herein, the following definitions shall apply unless otherwise indicated. For

purposes of this disclosure, the chemical elements are identified in accordance with the Periodic Table of the Elements, CAS version, Handbook of Chemistry and Physics, 75th Ed. Additionally, general principles of organic chemistry are described in "Organic Chemistry", Thomas Sorrell, University Science Books, Sausalito: 1999, and "March's Advanced Organic Chemistry", 5th Ed., Ed.: Smith, M.B. and March, J., John Wiley & Sons, New York: 2001.

[0033] *Administration:* As used herein, the term "administration" typically refers to the administration of a composition to a subject or system. Those of ordinary skill in the art will be aware of a variety of routes that may, in appropriate circumstances, be utilized for administration to a subject, for example a human. For example, in some embodiments, administration may be ocular, oral, parenteral, topical, *etc.* In some particular embodiments, administration may be bronchial (*e.g.*, by bronchial instillation), buccal, dermal (which may be or comprise, for example, one or more of topical to the dermis, intradermal, interdermal, transdermal, *etc*), enteral, intra-arterial, intradermal, intragastric, intramedullary, intramuscular, intranasal, intraperitoneal, intrathecal, intravenous, intraventricular, within a specific organ (e. g., intrahepatic), mucosal, nasal, oral, rectal, subcutaneous, sublingual, topical, tracheal (*e.g.*, by intratracheal instillation), vaginal, vitreal, *etc.* In some embodiments, administration may involve dosing that is intermittent (*e.g.*, a plurality of doses separated in time) and/or periodic (*e.g.*, individual doses separated by a common period of time) dosing. In some embodiments, administration may involve continuous dosing (*e.g.*, perfusion) for at least a selected period of time.

[0034] *Affinity*: As is known in the art, "affinity" is a measure of the tightness with a particular ligand (e.g., an agent) binds to its partner (e.g., beta-catenin or a portion thereof). Affinities can be measured in different ways. In some embodiments, affinity is measured by a quantitative assay. In some such embodiments, binding partner concentration may be fixed to be in excess of ligand concentration so as to mimic physiological conditions. Alternatively or additionally, in some embodiments, binding partner concentration and/or ligand concentration may be varied. In some such embodiments, affinity may be compared to a reference under comparable conditions (e.g., concentrations).

[0035] *Agent:* In general, the term "agent", as used herein, may be used to refer to a compound or entity of any chemical class including, for example, a polypeptide, nucleic acid, saccharide, lipid, small molecule, metal, or combination or complex thereof. In appropriate circumstances, as will be clear from context to those skilled in the art, the term may be utilized to refer to an entity that is or comprises a cell or organism, or a fraction, extract, or component thereof. Alternatively or additionally, as context will make clear, the term may be used to refer to a natural product in that it is found in and/or is obtained from nature. In some instances, again as will be clear from context, the term may be used to refer to one or more entities that is man-made in that it is designed, engineered, and/or produced through action of the hand of man and/or is not found in nature. In some embodiments, an agent may be utilized in isolated or

pure form; in some embodiments, an agent may be utilized in crude form. In some embodiments, potential agents may be provided as collections or libraries, for example that may be screened to identify or characterize active agents within them. In some cases, the term "agent" may refer to a compound or entity that is or comprises a polymer; in some cases, the term may refer to a compound or entity that comprises one or more polymeric moieties. In some embodiments, the term "agent" may refer to a compound or entity that is not a polymer and/or is substantially free of any polymer and/or of one or more particular polymeric moieties. In some embodiments, the term may refer to a compound or entity that lacks or is substantially free of any polymeric moiety. In some embodiments, an agent is a compound. In some embodiments, an agent is a stapled peptide.

[0036] *Aliphatic*: As used herein, "aliphatic" means a straight-chain (i.e., unbranched) or branched, substituted or unsubstituted hydrocarbon chain that is completely saturated or that contains one or more units of unsaturation, or a substituted or unsubstituted monocyclic, bicyclic, or polycyclic hydrocarbon ring that is completely saturated or that contains one or more units of unsaturation (but not aromatic), or combinations thereof. In some embodiments, aliphatic groups contain 1-50 aliphatic carbon atoms. In some embodiments, aliphatic groups contain 1-20 aliphatic carbon atoms. In other embodiments, aliphatic groups contain 1-10 aliphatic carbon atoms. In other embodiments, aliphatic groups contain 1-9 aliphatic carbon atoms. In other embodiments, aliphatic groups contain 1-8 aliphatic carbon atoms. In other embodiments, aliphatic groups contain 1-7 aliphatic carbon atoms. In other embodiments, aliphatic groups contain 1-6 aliphatic carbon atoms. In still other embodiments, aliphatic groups contain 1-5 aliphatic carbon atoms, and in yet other embodiments, aliphatic groups contain 1, 2, 3, or 4 aliphatic carbon atoms. Suitable aliphatic groups include, but are not limited to, linear or branched, substituted or unsubstituted alkyl, alkenyl, alkynyl groups and hybrids thereof such as (cycloalkyl)alkyl, (cycloalkenyl)alkyl or (cycloalkyl)alkenyl.

[0037] *Alkenyl*: As used herein, the term "alkenyl" refers to an aliphatic group, as defined herein, having one or more double bonds.

[0038] *Alkyl*: As used herein, the term "alkyl" is given its ordinary meaning in the art and may include saturated aliphatic groups, including straight-chain alkyl groups, branched-chain alkyl groups, cycloalkyl (alicyclic) groups, alkyl substituted cycloalkyl groups, and cycloalkyl substituted alkyl groups. In some embodiments, alkyl has 1-100 carbon atoms. In certain embodiments, a straight chain or branched chain alkyl has about 1-20 carbon atoms in its backbone (*e.g.*, C_1-C_{20} for straight chain, C_2-C_{20} for branched chain), and alternatively, about 1-10. In some embodiments, cycloalkyl rings have from about 3-10 carbon atoms in their ring structure where such rings are monocyclic, bicyclic, or polycyclic, and alternatively about 5, 6 or 7 carbons in the ring structure. In some embodiments, an alkyl group may be a lower alkyl group, wherein a lower alkyl group comprises 1-4 carbon atoms (*e.g.*, C_1-C_4 for straight

chain lower alkyls).

[0039] *Alkylene:* The term "alkylene" refers to a bivalent alkyl group.

[0040] *Amino acid:* In its broadest sense, as used herein, refers to any compound and/or substance that can be incorporated into a polypeptide chain, *e.g.*, through formation of one or more peptide bonds. In some embodiments, an amino acid comprising an amino group and an a carboxylic acid group. In some embodiments, an amino acid has the structure of $NH(R^{a1})–L^{a1}–C(R^{a2})(R^{a3})–L^{a2}–COOH$, wherein each variable is independently as described in the present disclosure. In some embodiments, an amino acid has the general structure $NH(R')–C(R')_2–COOH$, wherein each R' is independently as described in the present disclosure. In some embodiments, an amino acid has the general structure $H_2N–C(R')_2–COOH$, wherein R' is as described in the present disclosure. In some embodiments, an amino acid has the general structure $H_2N–C(H)(R')–COOH$, wherein R' is as described in the present disclosure. In some embodiments, an amino acid is a naturally-occurring amino acid. In some embodiments, an amino acid is a non-natural amino acid; in some embodiments, an amino acid is a D-amino acid; in some embodiments, an amino acid is an L-amino acid. "Standard amino acid" refers to any of the twenty standard L-amino acids commonly found in naturally occurring peptides. "Nonstandard amino acid" refers to any amino acid, other than the standard amino acids, regardless of whether it is prepared synthetically or obtained from a natural source. In some embodiments, an amino acid, including a carboxy- and/or amino-terminal amino acid in a polypeptide, can contain a structural modification as compared with the general structure above. For example, in some embodiments, an amino acid may be modified by methylation, amidation, acetylation, pegylation, glycosylation, phosphorylation, and/or substitution (*e.g.*, of the amino group, the carboxylic acid group, one or more protons, one or more hydrogens, and/or the hydroxyl group) as compared with the general structure. In some embodiments, such modification may, for example, alter the circulating half-life of a polypeptide containing the modified amino acid as compared with one containing an otherwise identical unmodified amino acid. In some embodiments, such modification does not significantly alter a relevant activity of a polypeptide containing the modified amino acid, as compared with one containing an otherwise identical unmodified amino acid. As will be clear from context, in some embodiments, the term "amino acid" may be used to refer to a free amino acid; in some embodiments it may be used to refer to an amino acid residue of a polypeptide.

[0041] *Analog:* As used herein, the term "analog" refers to a substance that shares one or more particular structural features, elements, components, or moieties with a reference substance. Typically, an "analog" shows significant structural similarity with the reference substance, for example sharing a core or consensus structure, but also differs in certain discrete ways. In some embodiments, an analog is a substance that can be generated from the reference substance, *e.g.*, by chemical manipulation of the

reference substance. In some embodiments, an analog is a substance that can be generated through performance of a synthetic process substantially similar to (*e.g.*, sharing a plurality of steps with) one that generates the reference substance. In some embodiments, an analog is or can be generated through performance of a synthetic process different from that used to generate the reference substance.

[0042] *Animal*: As used herein refers to any member of the animal kingdom. In some embodiments, "*animal*" refers to humans, of either sex and at any stage of development. In some embodiments, "*animal*" refers to non-human animals, at any stage of development. In certain embodiments, the non-human animal is a mammal (*e.g.*, a rodent, a mouse, a rat, a rabbit, a monkey, a dog, a cat, a sheep, cattle, a primate, and/or a pig). In some embodiments, animals include, but are not limited to, mammals, birds, reptiles, amphibians, fish, insects, and/or worms. In some embodiments, an animal may be a transgenic animal, genetically engineered animal, and/or a clone.

[0043] *Approximately:* As used herein, the term "approximately" or "about," as applied to one or more values of interest, refers to a value that is similar to a stated reference value. In certain embodiments, the term "approximately" or "about" refers to a range of values that fall within 25%, 20%, 19%, 18%, 17%, 16%, 15%, 14%, 13%, 12%, 11%, 10%, 9%, 8%, 7%, 6%, 5%, 4%, 3%, 2%, 1%, or less in either direction (greater than or less than) of the stated reference value unless otherwise stated or otherwise evident from the context (except where such number would exceed 100% of a possible value).

[0044] *Aryl*: The term "aryl" used alone or as part of a larger moiety as in "aralkyl," "aralkoxy," "aryloxyalkyl," *etc.* refers to monocyclic, bicyclic or polycyclic ring systems having a total of five to thirty ring members, wherein at least one ring in the system is aromatic. In some embodiments, an aryl group is a monocyclic, bicyclic or polycyclic ring system having a total of five to fourteen ring members, wherein at least one ring in the system is aromatic, and wherein each ring in the system contains 3 to 7 ring members. In some embodiments, an aryl group is a biaryl group. The term "aryl" may be used interchangeably with the term "aryl ring." In certain embodiments of the present disclosure, "aryl" refers to an aromatic ring system which includes, but not limited to, phenyl, biphenyl, naphthyl, binaphthyl, anthracyl and the like, which may bear one or more substituents. In some embodiments, also included within the scope of the term "aryl," as it is used herein, is a group in which an aromatic ring is fused to one or more non–aromatic rings, such as indanyl, phthalimidyl, naphthimidyl, phenanthridinyl, or tetrahydronaphthyl, and the like, where a radical or point of attachment is on an aryl ring.

[0045] *Associated with:* Two events or entities are "associated" with one another, as that term is used herein, if the presence, level and/or form of one is correlated with that of the other. For example, a particular entity (*e.g.*, nucleic acid (*e.g.*, genomic DNA, transcripts, mRNA, *etc.*), polypeptide, genetic signature, metabolite, microbe, *etc.*.) is considered to be associated with a particular disease, disorder, or condition, if its presence, level and/or form correlates with incidence of and/or susceptibility to the

disease, disorder, or condition (*e.g.*, across a relevant population).

[0046] *Binding*: It will be understood that the term "binding", as used herein, typically refers to a non-covalent association between or among agents. In many embodiments herein, binding is addressed with respect to particular agents and beta-catenin. It will be appreciated by those of ordinary skill in the art that such binding may be assessed in any of a variety of contexts. In some embodiments, binding is assessed with respect to beta-catenin. In some embodiments, binding is assessed with respect to one or more amino acid residues of beta-catenin. In some embodiments, binding is assessed with respect to one or more amino acid residues corresponding to (e.g., similarly positioned in three dimensional space and/or having certain similar properties and/or functions) those of beta-catenin.

[0047] *Binding site*: The term "binding site", as used herein, refers to a region of a target polypeptide, formed in three-dimensional space, that includes one or more or all interaction residues of the target polypeptide. In some embodiments, "binding site" may refer to one or more amino acid residues which comprise or are one or more or all interaction amino acid residues of a target polypeptide. As will be understood by those of ordinary skill in the art, a binding site may include residues that are adjacent to one another on a linear chain, and/or that are distal to one another on a linear chain but near to one another in three-dimensional space when a target polypeptide is folded. A binding site may comprise amino acid residues and/or saccharide residues.

[0048] *Carrier:* as used herein, refers to a diluent, adjuvant, excipient, or vehicle with which a composition is administered. In some exemplary embodiments, carriers can include sterile liquids, such as, for example, water and oils, including oils of petroleum, animal, vegetable or synthetic origin, such as, for example, peanut oil, soybean oil, mineral oil, sesame oil and the like. In some embodiments, carriers are or include one or more solid components.

[0049] *Comparable:* As used herein, the term "comparable" refers to two or more agents, entities, situations, sets of conditions, *etc.*, that may not be identical to one another but that are sufficiently similar to permit comparison there between so that one skilled in the art will appreciate that conclusions may reasonably be drawn based on differences or similarities observed. In some embodiments, comparable sets of conditions, circumstances, individuals, or populations are characterized by a plurality of substantially identical features and one or a small number of varied features. Those of ordinary skill in the art will understand, in context, what degree of identity is required in any given circumstance for two or more such agents, entities, situations, sets of conditions, *etc.* to be considered comparable. For example, those of ordinary skill in the art will appreciate that sets of circumstances, individuals, or populations are comparable to one another when characterized by a sufficient number and type of substantially identical features to warrant a reasonable conclusion that differences in results obtained or phenomena observed under or with different sets of circumstances, individuals, or populations are caused

by or indicative of the variation in those features that are varied.

[0050] *Composition:* Those skilled in the art will appreciate that the term "composition" may be used to refer to a discrete physical entity that comprises one or more specified components. In general, unless otherwise specified, a composition may be of any form – *e.g.*, gas, gel, liquid, solid, *etc.*

[0051] *Cycloaliphatic*: The term "cycloaliphatic," as used herein, refers to saturated or partially unsaturated aliphatic monocyclic, bicyclic, or polycyclic ring systems having, *e.g.*, from 3 to 30, members, wherein the aliphatic ring system is optionally substituted. Cycloaliphatic groups include, without limitation, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, cycloheptyl, cycloheptenyl, cyclooctyl, cyclooctenyl, norbornyl, adamantyl, and cyclooctadienyl. In some embodiments, the cycloalkyl has 3–6 carbons. The terms "cycloaliphatic" may also include aliphatic rings that are fused to one or more aromatic or nonaromatic rings, such as decahydronaphthyl or tetrahydronaphthyl, where a radical or point of attachment is on an aliphatic ring. In some embodiments, a carbocyclic group is bicyclic. In some embodiments, a carbocyclic group is tricyclic. In some embodiments, a carbocyclic group is polycyclic. In some embodiments, "cycloaliphatic" (or "carbocycle" or "cycloalkyl") refers to a monocyclic C_3-C_6 hydrocarbon, or a C_8-C_{10} bicyclic hydrocarbon that is completely saturated or that contains one or more units of unsaturation, but which is not aromatic, or a C_9-C_{16} tricyclic hydrocarbon that is completely saturated or that contains one or more units of unsaturation, but which is not aromatic.

[0052] *Derivative:* As used herein, the term "derivative" refers to a structural analogue of a reference substance. That is, a "derivative" is a substance that shows significant structural similarity with the reference substance, for example sharing a core or consensus structure, but also differs in certain discrete ways. In some embodiments, a derivative is a substance that can be generated from the reference substance by chemical manipulation. In some embodiments, a derivative is a substance that can be generated through performance of a synthetic process substantially similar to (*e.g.*, sharing a plurality of steps with) one that generates the reference substance.

[0053] *Dosage form* or *unit dosage form:* Those skilled in the art will appreciate that the term "dosage form" may be used to refer to a physically discrete unit of an active agent (*e.g.*, a therapeutic or diagnostic agent) for administration to a subject. Typically, each such unit contains a predetermined quantity of active agent. In some embodiments, such quantity is a unit dosage amount (or a whole fraction thereof) appropriate for administration in accordance with a dosing regimen that has been determined to correlate with a desired or beneficial outcome when administered to a relevant population (i.e., with a therapeutic dosing regimen). Those of ordinary skill in the art appreciate that the total amount of a therapeutic composition or agent administered to a particular subject is determined by one or more attending physicians and may involve administration of multiple dosage forms.

[0054] *Dosing regimen:* Those skilled in the art will appreciate that the term "dosing regimen" may be used to refer to a set of unit doses (typically more than one) that are administered individually to a subject, typically separated by periods of time. In some embodiments, a given therapeutic agent has a recommended dosing regimen, which may involve one or more doses. In some embodiments, a dosing regimen comprises a plurality of doses each of which is separated in time from other doses. In some embodiments, individual doses are separated from one another by a time period of the same length; in some embodiments, a dosing regimen comprises a plurality of doses and at least two different time periods separating individual doses. In some embodiments, all doses within a dosing regimen are of the same unit dose amount. In some embodiments, different doses within a dosing regimen are of different amounts. In some embodiments, a dosing regimen comprises a first dose in a first dose amount, followed by one or more additional doses in a second dose amount different from the first dose amount. In some embodiments, a dosing regimen comprises a first dose in a first dose amount, followed by one or more additional doses in a second dose amount same as the first dose amount. In some embodiments, a dosing regimen is correlated with a desired or beneficial outcome when administered across a relevant population (*i.e.*, is a therapeutic dosing regimen).

[0055] *Engineered:* In general, the term "engineered" refers to the aspect of having been manipulated by the hand of man. For example, in some embodiments, a peptide may be considered to be engineered if its amino acid sequence has been selected by man. For example, an engineered agent has an amino acid sequence that was selected based on preferences for corresponding amino acids at particular sites of protein-protein interactions. In some embodiments, an engineered sequence has an amino acid sequence that differs from the amino acid sequence of polypeptides included in the NCBI database that binds to a TCF site of beta-catenin. In many embodiments, provided agents are engineered agents. In some embodiments, engineered agents are peptide agents comprising non-natural amino acid residues, non-natural amino acid sequences, and/or peptide staples. In some embodiments, provided agents comprise or are engineered peptide agents which comprise engineered sequences.

[0056] *Halogen*: The term "halogen" means F, Cl, Br, or I.

[0057] *Heteroaliphatic*: The term "heteroaliphatic" is given its ordinary meaning in the art and refers to aliphatic groups as described herein in which one or more carbon atoms are replaced with one or more heteroatoms (*e.g.*, oxygen, nitrogen, sulfur, silicon, phosphorus, and the like).

[0058] *Heteroalkyl*: The term "heteroalkyl" is given its ordinary meaning in the art and refers to alkyl groups as described herein in which one or more carbon atoms is replaced with a heteroatom (*e.g.*, oxygen, nitrogen, sulfur, silicon, phosphorus, and the like). Examples of heteroalkyl groups include, but are not limited to, alkoxy, poly(ethylene glycol)-, alkyl-substituted amino, tetrahydrofuranyl, piperidinyl, morpholinyl, *etc.*

[0059] *Heteroaryl*: The terms "heteroaryl" and "heteroar–," used alone or as part of a larger moiety, *e.g.*, "heteroaralkyl," or "heteroaralkoxy," refer to monocyclic, bicyclic or polycyclic ring systems having, for example, a total of five to thirty, *e.g.*, 5, 6, 9, 10, 14, *etc.*, ring members, wherein at least one ring in the system is aromatic and at least one aromatic ring atom is a heteroatom. In some embodiments, a heteroatom is nitrogen, oxygen or sulfur. In some embodiments, a heteroaryl group is a group having 5 to 10 ring atoms (*i.e.*, monocyclic, bicyclic or polycyclic), in some embodiments 5, 6, 9, or 10 ring atoms. In some embodiments, a heteroaryl group has 6, 10, or 14 π electrons shared in a cyclic array; and having, in addition to carbon atoms, from one to five heteroatoms. Heteroaryl groups include, without limitation, thienyl, furanyl, pyrrolyl, imidazolyl, pyrazolyl, triazolyl, tetrazolyl, oxazolyl, isoxazolyl, oxadiazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl, indolizinyl, purinyl, naphthyridinyl, and pteridinyl. In some embodiments, a heteroaryl is a heterobiaryl group, such as bipyridyl and the like. The terms "heteroaryl" and "heteroar–", as used herein, also include groups in which a heteroaromatic ring is fused to one or more aryl, cycloaliphatic, or heterocyclyl rings, where a radical or point of attachment is on a heteroaromatic ring. Non-limiting examples include indolyl, isoindolyl, benzothienyl, benzofuranyl, dibenzofuranyl, indazolyl, benzimidazolyl, benzthiazolyl, quinolyl, isoquinolyl, cinnolinyl, phthalazinyl, quinazolinyl, quinoxalinyl, 4*H*–quinolizinyl, carbazolyl, acridinyl, phenazinyl, phenothiazinyl, phenoxazinyl, tetrahydroquinolinyl, tetrahydroisoquinolinyl, and pyrido[2,3–b]–1,4–oxazin–3(4H)–one. A heteroaryl group may be monocyclic, bicyclic or polycyclic. The term "heteroaryl" may be used interchangeably with the terms "heteroaryl ring," "heteroaryl group," or "heteroaromatic," any of which terms include rings that are optionally substituted. The term "heteroaralkyl" refers to an alkyl group substituted by a heteroaryl group, wherein the alkyl and heteroaryl portions independently are optionally substituted.

[0060] *Heteroatom*: The term "heteroatom" means an atom that is not carbon and is not hydrogen. In some embodiments, a heteroatom is oxygen, sulfur, nitrogen, phosphorus, boron or silicon (including any oxidized form of nitrogen, sulfur, phosphorus, or silicon; the quaternized form of any basic nitrogen or a substitutable nitrogen of a heterocyclic ring (for example, N as in 3,4-dihydro-2*H*-pyrrolyl), NH (as in pyrrolidinyl) or NR^+ (as in N-substituted pyrrolidinyl); *etc.*). In some embodiments, a heteroatom is boron, nitrogen, oxygen, silicon, sulfur, or phosphorus. In some embodiments, a heteroatom is nitrogen, oxygen, silicon, sulfur, or phosphorus. In some embodiments, a heteroatom is nitrogen, oxygen, sulfur, or phosphorus. In some embodiments, a heteroatom is nitrogen, oxygen or sulfur.

[0061] *Heterocyclyl*: As used herein, the terms "heterocycle," "heterocyclyl," "heterocyclic radical," and "heterocyclic ring" are used interchangeably and refer to a monocyclic, bicyclic or polycyclic ring moiety (*e.g.*, 3-30 membered) that is saturated or partially unsaturated and has one or more heteroatom ring atoms. In some embodiments, a heteroatom is boron, nitrogen, oxygen, silicon, sulfur, or

phosphorus. In some embodiments, a heteroatom is nitrogen, oxygen, silicon, sulfur, or phosphorus. In some embodiments, a heteroatom is nitrogen, oxygen, sulfur, or phosphorus. In some embodiments, a heteroatom is nitrogen, oxygen or sulfur. In some embodiments, a heterocyclyl group is a stable 5– to 7–membered monocyclic or 7– to 10–membered bicyclic heterocyclic moiety that is either saturated or partially unsaturated, and having, in addition to carbon atoms, one or more, preferably one to four, heteroatoms, as defined above. When used in reference to a ring atom of a heterocycle, the term "nitrogen" includes substituted nitrogen. As an example, in a saturated or partially unsaturated ring having 0–3 heteroatoms selected from oxygen, sulfur or nitrogen, the nitrogen may be N (as in 3,4–dihydro–2*H*–pyrrolyl), NH (as in pyrrolidinyl), or $^{+}$NR (as in *N*–substituted pyrrolidinyl). A heterocyclic ring can be attached to its pendant group at any heteroatom or carbon atom that results in a stable structure and any of the ring atoms can be optionally substituted. Examples of such saturated or partially unsaturated heterocyclic radicals include, without limitation, tetrahydrofuranyl, tetrahydrothienyl, pyrrolidinyl, piperidinyl, pyrrolinyl, tetrahydroquinolinyl, tetrahydroisoquinolinyl, decahydroquinolinyl, oxazolidinyl, piperazinyl, dioxanyl, dioxolanyl, diazepinyl, oxazepinyl, thiazepinyl, morpholinyl, and quinuclidinyl. The terms "heterocycle," "heterocyclyl," "heterocyclyl ring," "heterocyclic group," "heterocyclic moiety," and "heterocyclic radical," are used interchangeably herein, and also include groups in which a heterocyclyl ring is fused to one or more aryl, heteroaryl, or cycloaliphatic rings, such as indolinyl, 3*H*–indolyl, chromanyl, phenanthridinyl, or tetrahydroquinolinyl, where a radical or point of attachment is on a heteroaliphatic ring. A heterocyclyl group may be monocyclic, bicyclic or polycyclic. The term "heterocyclylalkyl" refers to an alkyl group substituted by a heterocyclyl, wherein the alkyl and heterocyclyl portions independently are optionally substituted.

[0062] *Homology:* As used herein, the term "homology" refers to the overall relatedness between polymeric molecules, *e.g.*, between nucleic acid molecules (*e.g.*, DNA molecules and/or RNA molecules) and/or between polypeptide molecules. In some embodiments, polymeric molecules are considered to be "homologous" to one another if their sequences are at least 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95%, or 99% identical. In some embodiments, polymeric molecules are considered to be "homologous" to one another if their sequences are at least 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95%, or 99% similar (*e.g.*, containing residues with related chemical properties at corresponding positions). For example, as is well known by those of ordinary skill in the art, certain amino acids are typically classified as similar to one another as "hydrophobic" or "hydrophilic" amino acids, and/or as having "polar" or "non-polar" side chains. Substitution of one amino acid for another of the same type may often be considered a "homologous" substitution. Typical amino acid categorizations are summarized below (hydrophobicity scale of Kyte and Doolittle, 1982: A simple method for displaying the hydropathic character of a protein. J. Mol. Biol.

157:105-132):

Amino Acid	3 Letter Code	1 Letter Code	Side Chain Polarity	Side Chain Acidity / Basicity	Hydropathy Index of Kyte and Doolittle
Alanine	Ala	A	nonpolar	neutral	1.8
Arginine	Arg	R	polar	basic	-4.5
Asparagine	Asn	N	polar	neutral	-3.5
Aspartic acid	Asp	D	polar	acidic	-3.5
Cysteine	Cys	C	nonpolar	neutral	2.5
Glutamic acid	Glu	E	polar	acidic	-3.5
Glutamine	Gln	Q	polar	neutral	-3.5
Glycine	Gly	G	nonpolar	neutral	-0.4
Histidine	His	H	polar	basic	-3.2
Isoleucine	Ile	I	nonpolar	neutral	4.5
Leucine	Leu	L	nonpolar	neutral	3.8
Lysine	Lys	K	polar	basic	-3.9
Methionine	Met	M	nonpolar	neutral	1.9
Phenylalanine	Phe	F	nonpolar	neutral	2.8
Proline	Pro	P	nonpolar	neutral	-1.6
Serine	Ser	S	polar	neutral	-0.8
Threonine	Thr	T	polar	neutral	-0.7
Tryptophan	Trp	W	nonpolar	neutral	-0.9
Tyrosine	Tyr	Y	polar	neutral	-1.3
Valine	Val	V	nonpolar	neutral	4.2

Ambiguous Amino Acids	**3-Letter**	**1-Letter**
Asparagine or aspartic acid	Asx	B
Glutamine or glutamic acid	Glx	Z
Leucine or Isoleucine	Xle	J
Unspecified or unknown amino acid	Xaa	X

[0063] As will be understood by those skilled in the art, a variety of algorithms are available that permit comparison of sequences in order to determine their degree of homology, including by permitting

gaps of designated length in one sequence relative to another when considering which residues "correspond" to one another in different sequences. Calculation of the percent homology between two nucleic acid sequences, for example, can be performed by aligning the two sequences for optimal comparison purposes (*e.g.*, gaps can be introduced in one or both of a first and a second nucleic acid sequences for optimal alignment and non-corresponding sequences can be disregarded for comparison purposes). In certain embodiments, the length of a sequence aligned for comparison purposes is at least 30%, at least 40%, at least 50%, at least 60%, at least 70%, at least 80%, at least 90%, at least 95%, or substantially 100% of the length of the reference sequence. The nucleotides at corresponding nucleotide positions are then compared. When a position in the first sequence is occupied by the same nucleotide as the corresponding position in the second sequence, then the molecules are identical at that position; when a position in the first sequence is occupied by a similar nucleotide as the corresponding position in the second sequence, then the molecules are similar at that position. The percent homology between the two sequences is a function of the number of identical and similar positions shared by the sequences, taking into account the number of gaps, and the length of each gap, which needs to be introduced for optimal alignment of the two sequences. Representative algorithms and computer programs useful in determining the percent homology between two nucleotide sequences include, for example, the algorithm of Meyers and Miller (CABIOS, 1989, 4: 11-17), which has been incorporated into the ALIGN program (version 2.0) using a PAM120 weight residue table, a gap length penalty of 12 and a gap penalty of 4. The percent homology between two nucleotide sequences can, alternatively, be determined for example using the GAP program in the GCG software package using an NWSgapdna.CMP matrix.

[0064] *Interaction residues*: The term "interaction residues", "interaction motifs", as used herein, refers to, with respect to an agent, residues or motifs in an agent that are designed to interact with particular target residues in a target polypeptide, or with respect to a target polypeptide, residues in a target polypeptide that interact with particular motifs (e.g., aromatic groups, amino acid residues, etc.) of an agent. Specifically, interaction residues and motifs of various agents are selected and arranged within the agents so that they will be displayed in three dimensional space within a predetermined distance (or volume) of identified target residues (e.g., upon binding, docking or other interaction assays). In many embodiments, interaction residues are direct-binding residues.

[0065] *"Improved,"* "*increased*" or "*reduced"*: As used herein, these terms, or grammatically comparable comparative terms, indicate values that are relative to a comparable reference measurement. For example, in some embodiments, an assessed value achieved with an agent of interest may be "improved" relative to that obtained with a comparable reference agent. Alternatively or additionally, in some embodiments, an assessed value achieved in a subject or system of interest may be "improved" relative to that obtained in the same subject or system under different conditions (*e.g.*, prior to or after an

event such as administration of an agent of interest), or in a different, comparable subject (*e.g.*, in a comparable subject or system that differs from the subject or system of interest in presence of one or more indicators of a particular disease, disorder or condition of interest, or in prior exposure to a condition or agent, *etc*). In some embodiments, comparative terms refer to statistically relevant differences (*e.g.*, that are of a prevalence and/or magnitude sufficient to achieve statistical relevance). Those skilled in the art will be aware, or will readily be able to determine, in a given context, a degree and/or prevalence of difference that is required or sufficient to achieve such statistical significance.

[0066] *Partially unsaturated*: As used herein, the term "partially unsaturated" refers to a moiety that includes at least one double or triple bond. The term "partially unsaturated" is intended to encompass groups having multiple sites of unsaturation, but is not intended to include aryl or heteroaryl moieties.

[0067] *Peptide:* The term "peptide" as used herein refers to a polypeptide. In some embodiments, a peptide is a polypeptide that is relatively short, for example having a length of less than about 100 amino acids, less than about 50 amino acids, less than about 40 amino acids less than about 30 amino acids, less than about 25 amino acids, less than about 20 amino acids, less than about 15 amino acids, or less than 10 amino acids.

[0068] *Pharmaceutical composition:* As used herein, the term "pharmaceutical composition" refers to an active agent, formulated together with one or more pharmaceutically acceptable carriers. In some embodiments, active agent is present in unit dose amount appropriate for administration in a therapeutic regimen that shows a statistically significant probability of achieving a predetermined therapeutic effect when administered to a relevant population. In some embodiments, pharmaceutical compositions may be specially formulated for administration in solid or liquid form, including those adapted for the following: oral administration, for example, drenches (aqueous or non-aqueous solutions or suspensions), tablets, *e.g.*, those targeted for buccal, sublingual, and systemic absorption, boluses, powders, granules, pastes for application to the tongue; parenteral administration, for example, by subcutaneous, intramuscular, intravenous or epidural injection as, for example, a sterile solution or suspension, or sustained-release formulation; topical application, for example, as a cream, ointment, or a controlled-release patch or spray applied to the skin, lungs, or oral cavity; intravaginally or intrarectally, for example, as a pessary, cream, or foam; sublingually; ocularly; transdermally; or nasally, pulmonary, and to other mucosal surfaces.

[0069] *Pharmaceutically acceptable:* As used herein, the phrase "pharmaceutically acceptable" refers to those compounds, materials, compositions, and/or dosage forms which are, within the scope of sound medical judgment, suitable for use in contact with the tissues of human beings and animals without excessive toxicity, irritation, allergic response, or other problem or complication, commensurate with a reasonable benefit/risk ratio.

[0070] *Pharmaceutically acceptable carrier:* As used herein, the term "pharmaceutically acceptable

carrier" means a pharmaceutically-acceptable material, composition or vehicle, such as a liquid or solid filler, diluent, excipient, or solvent encapsulating material, involved in carrying or transporting the subject compound from one organ, or portion of the body, to another organ, or portion of the body. Each carrier must be "acceptable" in the sense of being compatible with the other ingredients of the formulation and not injurious to the patient. Some examples of materials which can serve as pharmaceutically-acceptable carriers include: sugars, such as lactose, glucose and sucrose; starches, such as corn starch and potato starch; cellulose, and its derivatives, such as sodium carboxymethyl cellulose, ethyl cellulose and cellulose acetate; powdered tragacanth; malt; gelatin; talc; excipients, such as cocoa butter and suppository waxes; oils, such as peanut oil, cottonseed oil, safflower oil, sesame oil, olive oil, corn oil and soybean oil; glycols, such as propylene glycol; polyols, such as glycerin, sorbitol, mannitol and polyethylene glycol; esters, such as ethyl oleate and ethyl laurate; agar; buffering agents, such as magnesium hydroxide and aluminum hydroxide; alginic acid; pyrogen-free water; isotonic saline; RingeR's solution; ethyl alcohol; pH buffered solutions; polyesters, polycarbonates and/or polyanhydrides; and other non-toxic compatible substances employed in pharmaceutical formulations.

[0071] *Pharmaceutically acceptable salt:* The term "pharmaceutically acceptable salt", as used herein, refers to salts of such compounds that are appropriate for use in pharmaceutical contexts, i.e., salts which are, within the scope of sound medical judgment, suitable for use in contact with the tissues of humans and lower animals without undue toxicity, irritation, allergic response and the like, and are commensurate with a reasonable benefit/risk ratio. Pharmaceutically acceptable salts are well known. For example, S. M. Berge, et al. describes pharmaceutically acceptable salts in detail in J. Pharmaceutical Sciences, 66: 1-19 (1977). In some embodiments, pharmaceutically acceptable salts include, but are not limited to, nontoxic acid addition salts, which are salts of an amino group formed with inorganic acids such as hydrochloric acid, hydrobromic acid, phosphoric acid, sulfuric acid and perchloric acid or with organic acids such as acetic acid, maleic acid, tartaric acid, citric acid, succinic acid or malonic acid or by using other known methods such as ion exchange. In some embodiments, pharmaceutically acceptable salts include, but are not limited to, adipate, alginate, ascorbate, aspartate, benzenesulfonate, benzoate, bisulfate, borate, butyrate, camphorate, camphorsulfonate, citrate, cyclopentanepropionate, digluconate, dodecylsulfate, ethanesulfonate, formate, fumarate, glucoheptonate, glycerophosphate, gluconate, hemisulfate, heptanoate, hexanoate, hydroiodide, 2-hydroxy-ethanesulfonate, lactobionate, lactate, laurate, lauryl sulfate, malate, maleate, malonate, methanesulfonate, 2-naphthalenesulfonate, nicotinate, nitrate, oleate, oxalate, palmitate, pamoate, pectinate, persulfate, 3-phenylpropionate, phosphate, picrate, pivalate, propionate, stearate, succinate, sulfate, tartrate, thiocyanate, *p*-toluenesulfonate, undecanoate, valerate salts, and the like. In some embodiments, pharmaceutically acceptable salts include, but are not limited to, nontoxic base addition salts, such as those formed by acidic groups of provided compounds

with bases. Representative alkali or alkaline earth metal salts include salts of sodium, lithium, potassium, calcium, magnesium, and the like. In some embodiments, pharmaceutically acceptable salts are ammonium salts (*e.g.*, $-N(R)_3^+$). In some embodiments, pharmaceutically acceptable salts are sodium salts. In some embodiments, pharmaceutically acceptable salts include, when appropriate, nontoxic ammonium, quaternary ammonium, and amine cations formed using counterions such as halide, hydroxide, carboxylate, sulfate, phosphate, nitrate, alkyl having from 1 to 6 carbon atoms, sulfonate and aryl sulfonate.

[0072] *Polypeptide:* As used herein refers to any polymeric chain of amino acids. In some embodiments, a polypeptide has an amino acid sequence that occurs in nature. In some embodiments, a polypeptide has an amino acid sequence that does not occur in nature. In some embodiments, a polypeptide has an amino acid sequence that is engineered in that it is designed and/or produced through action of the hand of man. In some embodiments, a polypeptide may comprise or consist of natural amino acids, non-natural amino acids, or both. In some embodiments, a polypeptide may comprise or consist of only natural amino acids or only non-natural amino acids. In some embodiments, a polypeptide may comprise D-amino acids, L-amino acids, or both. In some embodiments, a polypeptide may comprise only D-amino acids. In some embodiments, a polypeptide may comprise only L-amino acids. In some embodiments, a polypeptide may include one or more pendant groups or other modifications, *e.g.*, modifying or attached to one or more amino acid side chains, at the polypeptide's N-terminus, at the polypeptide's C-terminus, or any combination thereof. In some embodiments, such pendant groups or modifications may be selected from the group consisting of acetylation, amidation, lipidation, methylation, pegylation, *etc.*, including combinations thereof. In some embodiments, a polypeptide may be cyclic, and/or may comprise a cyclic portion. In some embodiments, a polypeptide is not cyclic and/or does not comprise any cyclic portion. In some embodiments, a polypeptide is linear. In some embodiments, a polypeptide may be or comprise a stapled polypeptide. In some embodiments, the term "polypeptide" may be appended to a name of a reference polypeptide, activity, or structure; in such instances it is used herein to refer to polypeptides that share the relevant activity or structure and thus can be considered to be members of the same class or family of polypeptides. For each such class, the present specification provides and/or those skilled in the art will be aware of exemplary polypeptides within the class whose amino acid sequences and/or functions are known; in some embodiments, such exemplary polypeptides are reference polypeptides for the polypeptide class or family. In some embodiments, a member of a polypeptide class or family shows significant sequence homology or identity with, shares a common sequence motif (*e.g.*, a characteristic sequence element) with, and/or shares a common activity (in some embodiments at a comparable level or within a designated range) with a reference polypeptide of the class; in some embodiments with all polypeptides within the class). For example, in some

embodiments, a member polypeptide shows an overall degree of sequence homology or identity with a reference polypeptide that is at least about 30-40%, and is often greater than about 50%, 60%, 70%, 80%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99% or more and/or includes at least one region (*e.g.*, a conserved region that may in some embodiments be or comprise a characteristic sequence element) that shows very high sequence identity, often greater than 90% or even 95%, 96%, 97%, 98%, or 99%. Such a conserved region usually encompasses at least 3-4 and often up to 20 or more amino acids; in some embodiments, a conserved region encompasses at least one stretch of at least 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or more contiguous amino acids. In some embodiments, a relevant polypeptide may comprise or consist of a fragment of a parent polypeptide. In some embodiments, a useful polypeptide as may comprise or consist of a plurality of fragments, each of which is found in the same parent polypeptide in a different spatial arrangement relative to one another than is found in the polypeptide of interest (*e.g.*, fragments that are directly linked in the parent may be spatially separated in the polypeptide of interest or vice versa, and/or fragments may be present in a different order in the polypeptide of interest than in the parent), so that the polypeptide of interest is a derivative of its parent polypeptide.

[0073] *Prevent* or *prevention:* as used herein when used in connection with the occurrence of a disease, disorder, and/or condition, refers to reducing the risk of developing the disease, disorder and/or condition and/or to delaying onset of one or more characteristics or symptoms of the disease, disorder or condition. Prevention may be considered complete when onset of a disease, disorder or condition has been delayed for a predefined period of time.

[0074] *Protecting group*: The term "protecting group," as used herein, is well known in the art and includes those described in detail in Protecting Groups in Organic Synthesis, T. W. Greene and P. G. M. Wuts, 3rd edition, John Wiley & Sons, 1999, the entirety of which is incorporated herein by reference. Also included are those protecting groups specially adapted for nucleoside and nucleotide chemistry described in Current Protocols in Nucleic Acid Chemistry, edited by Serge L. Beaucage et al. 06/2012, the entirety of Chapter 2 is incorporated herein by reference. Suitable amino–protecting groups include methyl carbamate, ethyl carbamante, 9–fluorenylmethyl carbamate (Fmoc), 9–(2–sulfo)fluorenylmethyl carbamate, 9–(2,7–dibromo)fluoroenylmethyl carbamate, 2,7–di–t–butyl–[9–(10,10–dioxo–10,10,10,10–tetrahydrothioxanthyl)]methyl carbamate (DBD–Tmoc), 4–methoxyphenacyl carbamate (Phenoc), 2,2,2–trichloroethyl carbamate (Troc), 2–trimethylsilylethyl carbamate (Teoc), 2–phenylethyl carbamate (hZ), 1–(1–adamantyl)–1–methylethyl carbamate (Adpoc), 1,1–dimethyl–2–haloethyl carbamate, 1,1–dimethyl–2,2–dibromoethyl carbamate (DB–t–BOC), 1,1–dimethyl–2,2,2–trichloroethyl carbamate (TCBOC), 1–methyl–1–(4–biphenylyl)ethyl carbamate (Bpoc), 1–(3,5–di–t–butylphenyl)–1–methylethyl carbamate (t–Bumeoc), 2–(2'– and 4'–pyridyl)ethyl carbamate (Pyoc), 2–(N,N–dicyclohexylcarboxamido)ethyl carbamate, t–butyl carbamate (BOC), 1–adamantyl carbamate (Adoc),

vinyl carbamate (Voc), allyl carbamate (Alloc), 1–isopropylallyl carbamate (Ipaoc), cinnamyl carbamate (Coc), 4–nitrocinnamyl carbamate (Noc), 8–quinolyl carbamate, N–hydroxypiperidinyl carbamate, alkyldithio carbamate, benzyl carbamate (Cbz), p–methoxybenzyl carbamate (Moz), p–nitobenzyl carbamate, p–bromobenzyl carbamate, p–chlorobenzyl carbamate, 2,4–dichlorobenzyl carbamate, 4–methylsulfinylbenzyl carbamate (Msz), 9–anthrylmethyl carbamate, diphenylmethyl carbamate, 2–methylthioethyl carbamate, 2–methylsulfonylethyl carbamate, 2–(p–toluenesulfonyl)ethyl carbamate, [2–(1,3–dithianyl)]methyl carbamate (Dmoc), 4–methylthiophenyl carbamate (Mtpc), 2,4–dimethylthiophenyl carbamate (Bmpc), 2–phosphonioethyl carbamate (Peoc), 2–triphenylphosphonioisopropyl carbamate (Ppoc), 1,1–dimethyl–2–cyanoethyl carbamate, m–chloro–p–acyloxybenzyl carbamate, p–(dihydroxyboryl)benzyl carbamate, 5–benzisoxazolylmethyl carbamate, 2–(trifluoromethyl)–6–chromonylmethyl carbamate (Tcroc), m–nitrophenyl carbamate, 3,5–dimethoxybenzyl carbamate, o–nitrobenzyl carbamate, 3,4–dimethoxy–6–nitrobenzyl carbamate, phenyl(o–nitrophenyl)methyl carbamate, phenothiazinyl–(10)–carbonyl derivative, N'–p–toluenesulfonylaminocarbonyl derivative, N'–phenylaminothiocarbonyl derivative, t–amyl carbamate, S–benzyl thiocarbamate, p–cyanobenzyl carbamate, cyclobutyl carbamate, cyclohexyl carbamate, cyclopentyl carbamate, cyclopropylmethyl carbamate, p–decyloxybenzyl carbamate, 2,2–dimethoxycarbonylvinyl carbamate, o–(N,N–dimethylcarboxamido)benzyl carbamate, 1,1–dimethyl–3–(N,N–dimethylcarboxamido)propyl carbamate, 1,1–dimethylpropynyl carbamate, di(2–pyridyl)methyl carbamate, 2–furanylmethyl carbamate, 2–iodoethyl carbamate, isoborynl carbamate, isobutyl carbamate, isonicotinyl carbamate, p–(p'–methoxyphenylazo)benzyl carbamate, 1–methylcyclobutyl carbamate, 1–methylcyclohexyl carbamate, 1–methyl–1–cyclopropylmethyl carbamate, 1–methyl–1–(3,5–dimethoxyphenyl)ethyl carbamate, 1–methyl–1–(p–phenylazophenyl)ethyl carbamate, 1–methyl–1–phenylethyl carbamate, 1–methyl–1–(4–pyridyl)ethyl carbamate, phenyl carbamate, p–(phenylazo)benzyl carbamate, 2,4,6–tri–t–butylphenyl carbamate, 4–(trimethylammonium)benzyl carbamate, 2,4,6–trimethylbenzyl carbamate, formamide, acetamide, chloroacetamide, trichloroacetamide, trifluoroacetamide, phenylacetamide, 3–phenylpropanamide, picolinamide, 3–pyridylcarboxamide, N–benzoylphenylalanyl derivative, benzamide, p–phenylbenzamide, o–nitophenylacetamide, o–nitrophenoxyacetamide, acetoacetamide, (N'–dithiobenzyloxycarbonylamino)acetamide, 3–(p–hydroxyphenyl)propanamide, 3–(o–nitrophenyl)propanamide, 2–methyl–2–(o–nitrophenoxy)propanamide, 2–methyl–2–(o–phenylazophenoxy)propanamide, 4–chlorobutanamide, 3–methyl–3–nitrobutanamide, o–nitrocinnamide, N–acetylmethionine derivative, o–nitrobenzamide, o–(benzoyloxymethyl)benzamide, 4,5–diphenyl–3–oxazolin–2–one, N–phthalimide, N–dithiasuccinimide (Dts), N–2,3–diphenylmaleimide, N–2,5–dimethylpyrrole, N–1,1,4,4–tetramethyldisilylazacyclopentane adduct (STABASE), 5–substituted 1,3–dimethyl–1,3,5–triazacyclohexan–2–one, 5–substituted 1,3–

dibenzyl–1,3,5–triazacyclohexan–2–one, 1–substituted 3,5–dinitro–4–pyridone, N–methylamine, N–allylamine, N–[2–(trimethylsilyl)ethoxy]methylamine (SEM), N–3–acetoxypropylamine, N–(1–isopropyl–4–nitro–2–oxo–3–pyroolin–3–yl)amine, quaternary ammonium salts, N–benzylamine, N–di(4–methoxyphenyl)methylamine, N–5–dibenzosuberylamine, N–triphenylmethylamine (Tr), N–[(4–methoxyphenyl)diphenylmethyl]amine (MMTr), N–9–phenylfluorenylamine (PhF), N–2,7–dichloro–9–fluorenylmethyleneamine, N–ferrocenylmethylamino (Fcm), N–2–picolylamino N'–oxide, N–1,1–dimethylthiomethyleneamine, N–benzylideneamine, N–p–methoxybenzylideneamine, N–diphenylmethyleneamine, N–[(2–pyridyl)mesityl]methyleneamine, N–(N',N'–dimethylaminomethylene)amine, N,N'–isopropylidenediamine, N–p–nitrobenzylideneamine, N–salicylideneamine, N–5–chlorosalicylideneamine, N–(5–chloro–2–hydroxyphenyl)phenylmethyleneamine, N–cyclohexylideneamine, N–(5,5–dimethyl–3–oxo–1–cyclohexenyl)amine, N–borane derivative, N–diphenylborinic acid derivative, N–[phenyl(pentacarbonylchromium– or tungsten)carbonyl]amine, N–copper chelate, N–zinc chelate, N–nitroamine, N–nitrosoamine, amine N–oxide, diphenylphosphinamide (Dpp), dimethylthiophosphinamide (Mpt), diphenylthiophosphinamide (Ppt), dialkyl phosphoramidates, dibenzyl phosphoramidate, diphenyl phosphoramidate, benzenesulfenamide, o–nitrobenzenesulfenamide (Nps), 2,4–dinitrobenzenesulfenamide, pentachlorobenzenesulfenamide, 2–nitro–4–methoxybenzenesulfenamide, triphenylmethylsulfenamide, 3–nitropyridinesulfenamide (Npys), p–toluenesulfonamide (Ts), benzenesulfonamide, 2,3,6,–trimethyl–4–methoxybenzenesulfonamide (Mtr), 2,4,6–trimethoxybenzenesulfonamide (Mtb), 2,6–dimethyl–4–methoxybenzenesulfonamide (Pme), 2,3,5,6–tetramethyl–4–methoxybenzenesulfonamide (Mte), 4–methoxybenzenesulfonamide (Mbs), 2,4,6–trimethylbenzenesulfonamide (Mts), 2,6–dimethoxy–4–methylbenzenesulfonamide (iMds), 2,2,5,7,8–pentamethylchroman–6–sulfonamide (Pmc), methanesulfonamide (Ms), β–trimethylsilylethanesulfonamide (SES), 9–anthracenesulfonamide, 4–(4',8'–dimethoxynaphthylmethyl)benzenesulfonamide (DNMBS), benzylsulfonamide, trifluoromethylsulfonamide, and phenacylsulfonamide.

[0075] In some embodiments, suitable mono-protected amines include, but are not limited to, aralkylamines, carbamates, allyl amines, amides, and the like. Examples of suitable mono-protected amino moieties include t-butyloxycarbonylamino (–NHBOC), ethyloxycarbonylamino, methyloxycarbonylamino, trichloroethyloxycarbonylamino, allyloxycarbonylamino (–NHAlloc), benzyloxocarbonylamino (–NHCBZ), allylamino, benzylamino (–NHBn), fluorenylmethylcarbonyl (–NHFmoc), formamido, acetamido, chloroacetamido, dichloroacetamido, trichloroacetamido, phenylacetamido, trifluoroacetamido, benzamido, t-butyldiphenylsilyl, and the like. In some embodiments, suitable di-protected amines include amines that are substituted with two substituents

independently selected from those described above as mono-protected amines, and further include cyclic imides, such as phthalimide, maleimide, succinimide, and the like. In some embodiments, suitable di-protected amines include pyrroles and the like, 2,2,5,5-tetramethyl-[1,2,5]azadisilolidine and the like, and azide.

[0076] Suitably protected carboxylic acids further include, but are not limited to, silyl–, alkyl–, alkenyl–, aryl–, and arylalkyl–protected carboxylic acids. Examples of suitable silyl groups include trimethylsilyl, triethylsilyl, t–butyldimethylsilyl, t–butyldiphenylsilyl, triisopropylsilyl, and the like. Examples of suitable alkyl groups include methyl, benzyl, p–methoxybenzyl, 3,4–dimethoxybenzyl, trityl, t–butyl, tetrahydropyran–2–yl. Examples of suitable alkenyl groups include allyl. Examples of suitable aryl groups include optionally substituted phenyl, biphenyl, or naphthyl. Examples of suitable arylalkyl groups include optionally substituted benzyl (e.g., p–methoxybenzyl (MPM), 3,4–dimethoxybenzyl, O–nitrobenzyl, p–nitrobenzyl, p–halobenzyl, 2,6–dichlorobenzyl, p–cyanobenzyl), and 2– and 4–picolyl. In some embodiments, suitable protected carboxylic acids include, but are not limited to, optionally substituted C_{1-6} aliphatic esters, optionally substituted aryl esters, silyl esters, activated esters, amides, hydrazides, and the like. Examples of such ester groups include methyl, ethyl, propyl, isopropyl, butyl, isobutyl, benzyl, and phenyl ester, wherein each group is optionally substituted. Additional suitable protected carboxylic acids include oxazolines and ortho esters.

[0077] Suitable hydroxyl protecting groups include methyl, methoxylmethyl (MOM), methylthiomethyl (MTM), t–butylthiomethyl, (phenyldimethylsilyl)methoxymethyl (SMOM), benzyloxymethyl (BOM), p–methoxybenzyloxymethyl (PMBM), (4–methoxyphenoxy)methyl (p–AOM), guaiacolmethyl (GUM), t–butoxymethyl, 4–pentenyloxymethyl (POM), siloxymethyl, 2–methoxyethoxymethyl (MEM), 2,2,2–trichloroethoxymethyl, bis(2–chloroethoxy)methyl, 2–(trimethylsilyl)ethoxymethyl (SEMOR), tetrahydropyranyl (THP), 3–bromotetrahydropyranyl, tetrahydrothiopyranyl, 1–methoxycyclohexyl, 4–methoxytetrahydropyranyl (MTHP), 4–methoxytetrahydrothiopyranyl, 4–methoxytetrahydrothiopyranyl S,S–dioxide, 1–[(2–chloro–4–methyl)phenyl]–4–methoxypiperidin–4–yl (CTMP), 1,4–dioxan–2–yl, tetrahydrofuranyl, tetrahydrothiofuranyl, 2,3,3a,4,5,6,7,7a–octahydro–7,8,8–trimethyl–4,7–methanobenzofuran–2–yl, 1–ethoxyethyl, 1–(2–chloroethoxy)ethyl, 1–methyl–1–methoxyethyl, 1–methyl–1–benzyloxyethyl, 1–methyl–1–benzyloxy–2–fluoroethyl, 2,2,2–trichloroethyl, 2–trimethylsilylethyl, 2–(phenylselenyl)ethyl, t–butyl, allyl, p–chlorophenyl, p–methoxyphenyl, 2,4–dinitrophenyl, benzyl, p–methoxybenzyl, 3,4–dimethoxybenzyl, o–nitrobenzyl, p–nitrobenzyl, p–halobenzyl, 2,6–dichlorobenzyl, p–cyanobenzyl, p–phenylbenzyl, 2–picolyl, 4–picolyl, 3–methyl–2–picolyl N–oxido, diphenylmethyl, p,p'–dinitrobenzhydryl, 5–dibenzosuberyl, triphenylmethyl, α–naphthyldiphenylmethyl, p–methoxyphenyldiphenylmethyl, di(p–methoxyphenyl)phenylmethyl, tri(p–methoxyphenyl)methyl, 4–(4'–

bromophenacyloxyphenyl)diphenylmethyl, 4,4',4''–tris(4,5–dichlorophthalimidophenyl)methyl, 4,4',4''–tris(levulinoyloxyphenyl)methyl, 4,4',4''–tris(benzoyloxyphenyl)methyl, 3–(imidazol–1–yl)bis(4',4''–dimethoxyphenyl)methyl, 1,1–bis(4–methoxyphenyl)–1'–pyrenylmethyl, 9–anthryl, 9–(9–phenyl)xanthenyl, 9–(9–phenyl–10–oxo)anthryl, 1,3–benzodithiolan–2–yl, benzisothiazolyl S,S–dioxido, trimethylsilyl (TMS), triethylsilyl (TES), triisopropylsilyl (TIPS), dimethylisopropylsilyl (IPDMS), diethylisopropylsilyl (DEIPS), dimethylthexylsilyl, t–butyldimethylsilyl (TBDMS), t–butyldiphenylsilyl (TBDPS), tribenzylsilyl, tri–p–xylylsilyl, triphenylsilyl, diphenylmethylsilyl (DPMS), t–butylmethoxyphenylsilyl (TBMPS), formate, benzoylformate, acetate, chloroacetate, dichloroacetate, trichloroacetate, trifluoroacetate, methoxyacetate, triphenylmethoxyacetate, phenoxyacetate, p–chlorophenoxyacetate, 3–phenylpropionate, 4–oxopentanoate (levulinate), 4,4–(ethylenedithio)pentanoate (levulinoyldithioacetal), pivaloate, adamantoate, crotonate, 4–methoxycrotonate, benzoate, p–phenylbenzoate, 2,4,6–trimethylbenzoate (mesitoate), alkyl methyl carbonate, 9–fluorenylmethyl carbonate (Fmoc), alkyl ethyl carbonate, alkyl 2,2,2–trichloroethyl carbonate (Troc), 2–(trimethylsilyl)ethyl carbonate (TMSEC), 2–(phenylsulfonyl) ethyl carbonate (Psec), 2–(triphenylphosphonio) ethyl carbonate (Peoc), alkyl isobutyl carbonate, alkyl vinyl carbonate alkyl allyl carbonate, alkyl p–nitrophenyl carbonate, alkyl benzyl carbonate, alkyl p–methoxybenzyl carbonate, alkyl 3,4–dimethoxybenzyl carbonate, alkyl o–nitrobenzyl carbonate, alkyl p–nitrobenzyl carbonate, alkyl S–benzyl thiocarbonate, 4–ethoxy–1–napththyl carbonate, methyl dithiocarbonate, 2–iodobenzoate, 4–azidobutyrate, 4–nitro–4–methylpentanoate, o–(dibromomethyl)benzoate, 2–formylbenzenesulfonate, 2–(methylthiomethoxy)ethyl, 4–(methylthiomethoxy)butyrate, 2–(methylthiomethoxymethyl)benzoate, 2,6–dichloro–4–methylphenoxyacetate, 2,6–dichloro–4–(1,1,3,3–tetramethylbutyl)phenoxyacetate, 2,4–bis(1,1–dimethylpropyl)phenoxyacetate, chlorodiphenylacetate, isobutyrate, monosuccinoate, (E)–2–methyl–2–butenoate, o–(methoxycarbonyl)benzoate, α–naphthoate, nitrate, alkyl N,N,N',N'–tetramethylphosphorodiamidate, alkyl N–phenylcarbamate, borate, dimethylphosphinothioyl, alkyl 2,4–dinitrophenylsulfenate, sulfate, methanesulfonate (mesylate), benzylsulfonate, and tosylate (Ts). For protecting 1,2– or 1,3–diols, the protecting groups include methylene acetal, ethylidene acetal, 1–t–butylethylidene ketal, 1–phenylethylidene ketal, (4–methoxyphenyl)ethylidene acetal, 2,2,2–trichloroethylidene acetal, acetonide, cyclopentylidene ketal, cyclohexylidene ketal, cycloheptylidene ketal, benzylidene acetal, p–methoxybenzylidene acetal, 2,4–dimethoxybenzylidene ketal, 3,4–dimethoxybenzylidene acetal, 2–nitrobenzylidene acetal, methoxymethylene acetal, ethoxymethylene acetal, dimethoxymethylene ortho ester, 1–methoxyethylidene ortho ester, 1–ethoxyethylidine ortho ester, 1,2–dimethoxyethylidene ortho ester, α–methoxybenzylidene ortho ester, 1–(N,N–dimethylamino)ethylidene derivative, α–(N,N'–dimethylamino)benzylidene derivative, 2–oxacyclopentylidene ortho ester, di–t–butylsilylene group (DTBS), 1,3–(1,1,3,3–

tetraisopropyldisiloxanylidene) derivative (TIPDS), tetra–t–butoxydisiloxane–1,3–diylidene derivative (TBDS), cyclic carbonates, cyclic boronates, ethyl boronate, and phenyl boronate.

[0078] In some embodiments, a hydroxyl protecting group is acetyl, t-butyl, tbutoxymethyl, methoxymethyl, tetrahydropyranyl, 1 -ethoxyethyl, 1 -(2-chloroethoxy)ethyl, 2- trimethylsilylethyl, p-chlorophenyl, 2,4-dinitrophenyl, benzyl, benzoyl, p-phenylbenzoyl, 2,6- dichlorobenzyl, diphenylmethyl, p-nitrobenzyl, triphenylmethyl (trityl), 4,4'-dimethoxytrityl, trimethylsilyl, triethylsilyl, t-butyldimethylsilyl, t-butyldiphenylsilyl, triphenylsilyl, triisopropylsilyl, benzoylformate, chloroacetyl, trichloroacetyl, trifiuoroacetyl, pivaloyl, 9- fluorenylmethyl carbonate, mesylate, tosylate, triflate, trityl, monomethoxytrityl (MMTr), 4,4'-dimethoxytrityl, (DMTr) and 4,4',4"-trimethoxytrityl (TMTr), 2-cyanoethyl (CE or Cne), 2-(trimethylsilyl)ethyl (TSE), 2-(2-nitrophenyl)ethyl, 2-(4-cyanophenyl)ethyl 2-(4-nitrophenyl)ethyl (NPE), 2-(4-nitrophenylsulfonyl)ethyl, 3,5-dichlorophenyl, 2,4-dimethylphenyl, 2-nitrophenyl, 4-nitrophenyl, 2,4,6-trimethylphenyl, 2-(2-nitrophenyl)ethyl, butylthiocarbonyl, 4,4',4"-tris(benzoyloxy)trityl, diphenylcarbamoyl, levulinyl, 2-(dibromomethyl)benzoyl (Dbmb), 2-(isopropylthiomethoxymethyl)benzoyl (Ptmt), 9-phenylxanthen-9-yl (pixyl) or 9-(p-methoxyphenyl)xanthine-9-y1 (MOX). In some embodiments, each of the hydroxyl protecting groups is, independently selected from acetyl, benzyl, t- butyldimethylsilyl, t-butyldiphenylsilyl and 4,4'-dimethoxytrityl. In some embodiments, the hydroxyl protecting group is selected from the group consisting of trityl, monomethoxytrityl and 4,4'-dimethoxytrityl group. In some embodiments, a phosphorous linkage protecting group is a group attached to the phosphorous linkage (e.g., an internucleotidic linkage) throughout oligonucleotide synthesis. In some embodiments, a protecting group is attached to a sulfur atom of an phosphorothioate group. In some embodiments, a protecting group is attached to an oxygen atom of an internucleotide phosphorothioate linkage. In some embodiments, a protecting group is attached to an oxygen atom of the internucleotide phosphate linkage. In some embodiments a protecting group is 2-cyanoethyl (CE or Cne), 2-trimethylsilylethyl, 2-nitroethyl, 2-sulfonylethyl, methyl, benzyl, o-nitrobenzyl, 2-(p-nitrophenyl)ethyl (NPE or Npe), 2-phenylethyl, 3-(N-tert-butylcarboxamido)-1-propyl, 4-oxopentyl, 4-methylthio-l-butyl, 2-cyano-1,1-dimethylethyl, 4-N-methylaminobutyl, 3-(2-pyridyl)-1-propyl, 2-[N-methyl-N-(2-pyridyl)]aminoethyl, 2-(N-formyl,N-methyl)aminoethyl, or 4-[N-methyl-N-(2,2,2-trifluoroacetyl)amino]butyl.

[0079] Protected thiols are well known in the art and include those described in detail in Greene (1999). Suitable protected thiols further include, but are not limited to, disulfides, thioethers, silyl thioethers, thioesters, thiocarbonates, and thiocarbamates, and the like. Examples of such groups include, but are not limited to, alkyl thioethers, benzyl and substituted benzyl thioethers, triphenylmethyl thioethers, and trichloroethoxycarbonyl thioester, to name but a few.

[0080] *Reference:* As used herein describes a standard or control relative to which a comparison is

performed. For example, in some embodiments, an agent, animal, individual, population, sample, sequence or value of interest is compared with a reference or control agent, animal, individual, population, sample, sequence or value. In some embodiments, a reference or control is tested and/or determined substantially simultaneously with the testing or determination of interest. In some embodiments, a reference or control is a historical reference or control, optionally embodied in a tangible medium. Typically, as would be understood by those skilled in the art, a reference or control is determined or characterized under comparable conditions or circumstances to those under assessment. Those skilled in the art will appreciate when sufficient similarities are present to justify reliance on and/or comparison to a particular possible reference or control.

[0081] *Specificity*: As is known in the art, "specificity" is a measure of the ability of a particular ligand (e.g., an agent) to distinguish its binding partner (e.g., beta-catenin) from other potential binding partners (e.g., another protein, another portion (e.g., domain) of beta-catenin.

[0082] *Substitution*: As described herein, compounds of the disclosure may contain optionally substituted and/or substituted moieties. In general, the term "substituted," whether preceded by the term "optionally" or not, means that one or more hydrogens of the designated moiety are replaced with a suitable substituent. Unless otherwise indicated, an "optionally substituted" group may have a suitable substituent at each substitutable position of the group, and when more than one position in any given structure may be substituted with more than one substituent selected from a specified group, the substituent may be either the same or different at every position. Combinations of substituents envisioned by this disclosure are preferably those that result in the formation of stable or chemically feasible compounds. The term "stable," as used herein, refers to compounds that are not substantially altered when subjected to conditions to allow for their production, detection, and, in certain embodiments, their recovery, purification, and use for one or more of the purposes disclosed herein. In some embodiments, example substituents are described below.

[0083] Suitable monovalent substituents are halogen; $-(CH_2)_{0-4}R°$; $-(CH_2)_{0-4}OR°$; $-O(CH_2)_{0-4}R^o$, $-O-(CH_2)_{0-4}C(O)OR°$; $-(CH_2)_{0-4}CH(OR°)_2$; $-(CH_2)_{0-4}Ph$, which may be substituted with R°; $-(CH_2)_{0-4}O(CH_2)_{0-1}Ph$ which may be substituted with R°; –CH=CHPh, which may be substituted with R°; $-(CH_2)_{0-4}O(CH_2)_{0-1}$-pyridyl which may be substituted with R°; $-NO_2$; –CN; $-N_3$; $-(CH_2)_{0-4}N(R°)_2$; $-(CH_2)_{0-4}N(R°)C(O)R°$; $-N(R°)C(S)R°$; $-(CH_2)_{0-4}N(R°)C(O)N(R°)_2$; $-N(R°)C(S)N(R°)_2$; $-(CH_2)_{0-4}N(R°)C(O)OR°$; $-N(R°)N(R°)C(O)R°$; $-N(R°)N(R°)C(O)N(R°)_2$; $-N(R°)N(R°)C(O)OR°$; $-(CH_2)_{0-4}C(O)R°$; $-C(S)R°$; $-(CH_2)_{0-4}C(O)OR°$; $-(CH_2)_{0-4}C(O)SR°$; $-(CH_2)_{0-4}C(O)OSi(R°)_3$; $-(CH_2)_{0-4}OC(O)R°$; $-OC(O)(CH_2)_{0-4}SR°$, $-SC(S)SR°$; $-(CH_2)_{0-4}SC(O)R°$; $-(CH_2)_{0-4}C(O)N(R°)_2$; $-C(S)N(R°)_2$; $-C(S)SR°$; $-SC(S)SR°$, $-(CH_2)_{0-4}OC(O)N(R°)_2$; $-C(O)N(OR°)R°$; $-C(O)C(O)R°$; $-C(O)CH_2C(O)R°$;

−C(NOR°)R°; -$(CH_2)_{0-4}$SSR°; –$(CH_2)_{0-4}$S(O)$_2$R°; –$(CH_2)_{0-4}$S(O)$_2$OR°; –$(CH_2)_{0-4}$OS(O)$_2$R°; −S(O)$_2$N(R°)$_2$; -$(CH_2)_{0-4}$S(O)R°; –N(R°)S(O)$_2$N(R°)$_2$; –N(R°)S(O)$_2$R°; –N(OR°)R°; −C(NH)N(R°)$_2$; –Si(R°)$_3$; –OSi(R°)$_3$; −P(R°)$_2$; −P(OR°)$_2$; −OP(R°)$_2$; −OP(OR°)$_2$; −N(R°)P(R°)$_2$; −B(R°)$_2$; −OB(R°)$_2$; −P(O)(R°)$_2$; −OP(O)(R°)$_2$; −N(R°)P(O)(R°)$_2$; –(C_{1-4} straight or branched alkylene)O–N(R°)$_2$; or –(C_{1-4} straight or branched alkylene)C(O)O–N(R°)$_2$; wherein each R° may be substituted as defined below and is independently hydrogen, C_{1-20} aliphatic, C_{1-20} heteroaliphatic having 1–5 heteroatoms independently selected from nitrogen, oxygen, sulfur, silicon and phosphorus, –CH_2–(C_{6-14} aryl), –O$(CH_2)_{0-1}$(C_{6-14} aryl), −CH_2-(5-14 membered heteroaryl ring), a 5–20 membered, monocyclic, bicyclic, or polycyclic, saturated, partially unsaturated or aryl ring having 0–5 heteroatoms independently selected from nitrogen, oxygen, sulfur, silicon and phosphorus, or, notwithstanding the definition above, two independent occurrences of R°, taken together with their intervening atom(s), form a 5–20 membered, monocyclic, bicyclic, or polycyclic, saturated, partially unsaturated or aryl ring having 0–5 heteroatoms independently selected from nitrogen, oxygen, sulfur, silicon and phosphorus, which may be substituted as defined below.

[0084] Suitable monovalent substituents on R° (or the ring formed by taking two independent occurrences of R° together with their intervening atoms), are independently halogen, –$(CH_2)_{0-2}$R•, –(haloR•), –$(CH_2)_{0-2}$OH, –$(CH_2)_{0-2}$OR•, –$(CH_2)_{0-2}$CH(OR•)$_2$; –O(haloR•), –CN, –N_3, –$(CH_2)_{0-2}$C(O)R•, –$(CH_2)_{0-2}$C(O)OH, –$(CH_2)_{0-2}$C(O)OR•, –$(CH_2)_{0-2}$SR•, –$(CH_2)_{0-2}$SH, –$(CH_2)_{0-2}$$NH_2$, –$(CH_2)_{0-2}$NHR•, –$(CH_2)_{0-2}$NR•$_2$, –$NO_2$, –SiR•$_3$, –OSiR•$_3$, -C(O)SR•, –($C_{1-4}$ straight or branched alkylene)C(O)OR•, or –SSR• wherein each R• is unsubstituted or where preceded by "halo" is substituted only with one or more halogens, and is independently selected from C_{1-4} aliphatic, –CH_2Ph, –O$(CH_2)_{0-1}$Ph, or a 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. Suitable divalent substituents on a saturated carbon atom of R° include =O and =S.

[0085] Suitable divalent substituents are the following: =O, =S, =NNR*$_2$, =NNHC(O)R*, =NNHC(O)OR*, =NNHS(O)$_2$R*, =NR*, =NOR*, –O(C(R*$_2$))$_{2-3}$O–, or –S(C(R*$_2$))$_{2-3}$S–, wherein each independent occurrence of R* is selected from hydrogen, C_{1-6} aliphatic which may be substituted as defined below, or an unsubstituted 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. Suitable divalent substituents that are bound to vicinal substitutable carbons of an "optionally substituted" group include: –O(CR*$_2$)$_{2-3}$O–, wherein each independent occurrence of R* is selected from hydrogen, C_{1-6} aliphatic which may be substituted as defined below, or an unsubstituted 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0086] Suitable substituents on the aliphatic group of R* are halogen, –R•, -(haloR•), –OH, −OR•, –

O(haloR•), –CN, –C(O)OH, –C(O)OR•, –NH_2, –NHR•, –$NR•_2$, or –NO_2, wherein each R• is unsubstituted or where preceded by "halo" is substituted only with one or more halogens, and is independently $C_{1–4}$ aliphatic, –CH_2Ph, –$O(CH_2)_{0–1}$Ph, or a 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0087] In some embodiments, suitable substituents on a substitutable nitrogen are –R†, –$NR†_2$, –C(O)R†, –C(O)OR†, –C(O)C(O)R†, –$C(O)CH_2C(O)R†$, –$S(O)_2R†$, –$S(O)_2NR†_2$, –C(S)$NR†_2$, –C(NH)$NR†_2$, or –$N(R†)S(O)_2R†$; wherein each R† is independently hydrogen, $C_{1–6}$ aliphatic which may be substituted as defined below, unsubstituted –OPh, or an unsubstituted 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or, notwithstanding the definition above, two independent occurrences of R†, taken together with their intervening atom(s) form an unsubstituted 3–12–membered saturated, partially unsaturated, or aryl mono– or bicyclic ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0088] Suitable substituents on the aliphatic group of R† are independently halogen, –R•, -(haloR•), –OH, –OR•, –O(haloR•), –CN, –C(O)OH, –C(O)OR•, –NH_2, –NHR•, –$NR•_2$, or –NO_2, wherein each R• is unsubstituted or where preceded by "halo" is substituted only with one or more halogens, and is independently $C_{1–4}$ aliphatic, –CH_2Ph, –$O(CH_2)_{0–1}$Ph, or a 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0089] *Subject:* As used herein, the term "subject" or "test subject" refers to any organism to which a provided compound or composition is administered in accordance with the present disclosure *e.g.,* for experimental, diagnostic, prophylactic, and/or therapeutic purposes. Typical subjects include animals (*e.g.,* mammals such as mice, rats, rabbits, non-human primates, and humans; insects; worms; *etc.*) and plants. In some embodiments, a subject may be suffering from, and/or susceptible to a disease, disorder, and/or condition. In some embodiments, a subject is a human.

[0090] *Susceptible to*: An individual who is "susceptible to" a disease, disorder, and/or condition is one who has a higher risk of developing the disease, disorder, and/or condition than does a member of the general public. In some embodiments, an individual who is susceptible to a disease, disorder and/or condition may not have been diagnosed with the disease, disorder, and/or condition. In some embodiments, an individual who is susceptible to a disease, disorder, and/or condition may exhibit symptoms of the disease, disorder, and/or condition. In some embodiments, an individual who is susceptible to a disease, disorder, and/or condition may not exhibit symptoms of the disease, disorder, and/or condition. In some embodiments, an individual who is susceptible to a disease, disorder, and/or condition will develop the disease, disorder, and/or condition. In some embodiments, an individual who is susceptible to a disease, disorder, and/or condition will not develop the disease, disorder, and/or condition.

[0091] *Target polypeptide*: A "target polypeptide", as that term is used herein, is a polypeptide with which an agent interacts. In some embodiments, a target polypeptide is a beta-catenin polypeptide. In some embodiments, a target polypeptide comprises, consists essentially of, or is a binding site of beta-catenin polypeptide.

[0092] *Target residue*: A "target residue", as that term is used herein, is a residue within a target polypeptide with which an agent is designed to interact. For example, an agent may be characterized by particular interaction motifs (e.g., aromatic groups as described herein) and/or residues (e.g., amino acid residues comprising aromatic groups as described herein) selected and arranged (by virtue of being presented on the selected scaffold) to be within a certain predetermined distance (or volume) of a target residue. In some embodiments, a target residue is or comprises an amino acid residue.

[0093] *Therapeutic agent:* As used herein, the phrase "therapeutic agent" refers to an agent that, when administered to a subject, has a therapeutic effect and/or elicits a desired biological and/or pharmacological effect. In some embodiments, a therapeutic agent is any substance that can be used to alleviate, ameliorate, relieve, inhibit, prevent, delay onset of, reduce severity of, and/or reduce incidence of one or more symptoms or features of a disease, disorder, and/or condition.

[0094] *Therapeutic regimen*: A "therapeutic regimen", as that term is used herein, refers to a dosing regimen whose administration across a relevant population may be correlated with a desired or beneficial therapeutic outcome.

[0095] *Therapeutically effective amount:* As used herein, the term "therapeutically effective amount" means an amount of a substance (*e.g.,* a therapeutic agent, composition, and/or formulation) that elicits a desired biological response when administered as part of a therapeutic regimen. In some embodiments, a therapeutically effective amount of a substance is an amount that is sufficient, when administered to a subject suffering from or susceptible to a disease, disorder, and/or condition, to treat, diagnose, prevent, and/or delay the onset of the disease, disorder, and/or condition. As will be appreciated by those of ordinary skill in this art, the effective amount of a substance may vary depending on such factors as the desired biological endpoint, the substance to be delivered, the target cell or tissue, *etc.* For example, the effective amount of compound in a formulation to treat a disease, disorder, and/or condition is the amount that alleviates, ameliorates, relieves, inhibits, prevents, delays onset of, reduces severity of and/or reduces incidence of one or more symptoms or features of the disease, disorder, and/or condition. In some embodiments, a therapeutically effective amount is administered in a single dose; in some embodiments, multiple unit doses are required to deliver a therapeutically effective amount.

[0096] *Treat:* As used herein, the term "treat," "treatment," or "treating" refers to any method used to partially or completely alleviate, ameliorate, relieve, inhibit, prevent, delay onset of, reduce severity of, and/or reduce incidence of one or more symptoms or features of a disease, disorder, and/or condition.

Treatment may be administered to a subject who does not exhibit signs of a disease, disorder, and/or condition. In some embodiments, treatment may be administered to a subject who exhibits only early signs of the disease, disorder, and/or condition, for example for the purpose of decreasing the risk of developing pathology associated with the disease, disorder, and/or condition.

[0097] *Unit dose*: The expression "unit dose" as used herein refers to an amount administered as a single dose and/or in a physically discrete unit of a pharmaceutical composition. In many embodiments, a unit dose contains a predetermined quantity of an active agent. In some embodiments, a unit dose contains an entire single dose of the agent. In some embodiments, more than one unit dose is administered to achieve a total single dose. In some embodiments, administration of multiple unit doses is required, or expected to be required, in order to achieve an intended effect. A unit dose may be, for example, a volume of liquid (*e.g.*, an acceptable carrier) containing a predetermined quantity of one or more therapeutic agents, a predetermined amount of one or more therapeutic agents in solid form, a sustained release formulation or drug delivery device containing a predetermined amount of one or more therapeutic agents, *etc.* It will be appreciated that a unit dose may be present in a formulation that includes any of a variety of components in addition to the therapeutic agent(s). For example, acceptable carriers (*e.g.*, pharmaceutically acceptable carriers), diluents, stabilizers, buffers, preservatives, *etc.*, may be included as described infra. It will be appreciated by those skilled in the art, in many embodiments, a total appropriate daily dosage of a particular therapeutic agent may comprise a portion, or a plurality, of unit doses, and may be decided, for example, by the attending physician within the scope of sound medical judgment. In some embodiments, the specific effective dose level for any particular subject or organism may depend upon a variety of factors including the disorder being treated and the severity of the disorder; activity of specific active compound employed; specific composition employed; age, body weight, general health, sex and diet of the subject; time of administration, and rate of excretion of the specific active compound employed; duration of the treatment; drugs and/or additional therapies used in combination or coincidental with specific compound(s) employed, and like factors well known in the medical arts.

[0098] *Unsaturated*: The term "unsaturated" as used herein, means that a moiety has one or more units of unsaturation.

[0099] Unless otherwise specified, salts, such as pharmaceutically acceptable acid or base addition salts, stereoisomeric forms, and tautomeric forms, of provided compound are included.

[0100] As used herein in the present disclosure, unless otherwise clear from context, (i) the term "a" or "an" may be understood to mean "at least one"; (ii) the term "or" may be understood to mean "and/or"; (iii) the terms "comprising", "comprise", "including" (whether used with "not limited to" or not), and "include" (whether used with "not limited to" or not) may be understood to encompass itemized

components or steps whether presented by themselves or together with one or more additional components or steps; (iv) the term "another" may be understood to mean at least an additional/second one or more; (v) the terms "about" and "approximately" may be understood to permit standard variation as would be understood by those of ordinary skill in the art; and (vi) where ranges are provided, endpoints are included.

Stapled Peptides

[0101] In some embodiments, a provided agent is or comprises a peptide. In some embodiments, a provided agent is a peptide. In some embodiments, a peptide is a stapled peptide. In some embodiments, a provided agent is a stapled peptide. In some embodiments, a peptide is a stitched peptide. In some embodiments, a provided agent is a stitched peptide. In some embodiments, a stitched peptide comprises two or more staples, wherein two staples are bonded to the same peptide backbone atom. Stapled peptides as described herein are typically peptides in which two or more amino acids of a peptide chain are linked through connection of two peptide backbone atoms of the amino acid residues and, as is understood by those skilled in the art, the connection is not through the peptide backbone between the linked amino acid residues. In some embodiments, a stapled peptide comprises one or more staples. A staple as described herein is a linker that can link one amino acid residue to another amino acid residue through bonding to a peptide backbone atom of each of the amino acid residues and, as is understood by those skilled in the art, the connection through a staple is not through the peptide backbone between the linked amino acid residues. In some embodiments, a staple bonds to the peptide backbone by replacing one or more hydrogen and/or substituents (e.g., side chains, O, S, etc.) on peptide backbone atoms (e.g., C, N, etc.). In some embodiments, side chains form portions of staples. In some embodiments, a staple is bonded to two carbon backbone atoms, e.g., two alpha carbon atoms. In some embodiments, a staple comprises $C(R')_2$ or $N(R')$, either individually or as part of a large moiety, wherein R' is R and is taken together with another group attached to a backbone atom which can be R (e.g., R^{a3}) and their intervening atoms to form a ring as described herein (e.g., when PyrS2 is stapled in various peptides).

[0102] As will be appreciated by those of ordinary skill in the art, a variety of peptide stapling technologies are available, including both hydrocarbon-stapling and non-hydrocarbon-stapling technologies, and can be utilized in accordance with the present disclosure. Various technologies for stapled and stitched peptides, including various staples and/or methods for manufacturing are available and may be utilized in accordance with the present disclosure, e.g., those described in WO 2019/051327 and WO 2020/041270, the staples of each of which are incorporated herein by reference.

[0103] In some embodiments, a peptide, e.g., a stapled peptide, is or comprise a helical structure. In some embodiments, a peptide is a stapled peptide.

[0104] In some embodiments, a staple is a hydrocarbon staple. In some embodiments, a staple as described herein is a non-hydrocarbon staple. In some embodiments, a non-hydrocarbon staple comprises one or more chain heteroatoms wherein a chain of a staple is the shortest covalent connection within the staple from one end of the staple to the other end of the staple. In some embodiments, a non-hydrocarbon staple is or comprises at least one sulfur atom derived from an amino acid residue of a polypeptide. In some embodiments, a non-hydrocarbon staple comprises two sulfur atom derived from two different amino acid residues of a polypeptide. In some embodiments, a non-hydrocarbon staple comprises two sulfur atoms derived from two different cysteine residues of a polypeptide. In some embodiments, a staple is a cysteine staple. In some embodiments, a staple is a non-cysteine staple. In some embodiments, a non-hydrocarbon staple is a carbamate staple and comprises a carbamate moiety (e.g., −N(R')−C(O)−O−) in its chain. In some embodiments, a non-hydrocarbon staple is an amino staple and comprises an amino group (e.g., −N(R')−) in its chain. In some embodiments, a non-hydrocarbon staple is an ester staple and comprises an ester moiety (−C(O)−O−) in its chain. In some embodiments, a non-hydrocarbon staple is an amide staple and comprises an amide moiety (−C(O)−N(R')−) in its chain. In some embodiments, a non-hydrocarbon staple is a sulfonamide staple and comprises a sulfonamide moiety (−$S(O)_2$−N(R')−) in its chain. In some embodiments, a non-hydrocarbon staple is an ether staple and comprises an ether moiety (−O−) in its chain. In some embodiments, an amino group in an amino staple, e.g., (−N(R')−) is not bonded to a carbon atom that additionally forms a double bond with a heteroatom (*e.g.*, −C(=O), −C(=S), −C(=N−R'), *etc.*) so that it is not part of another nitrogen-containing group such as amide, carbamate, etc. In some embodiments, R' of a carbamate moiety, amino group, amide moiety, sulfonamide moiety, or ether moiety is R, and is taken together with an R group attached to a backbone (e.g., R^{a3} when it is R) and their intervening atoms to form a ring as described herein. In some embodiments, R' of a carbamate moiety or amino group is R, and is taken together with an R group attached to a backbone (e.g., R^{a3} when it is R) and their intervening atoms to form a ring as described herein.

[0105] In some embodiments, a staple comprises one or more amino groups, e.g., −N(R')−, wherein each R' is independently as described herein. In some embodiments, −N(R')− bonds to two carbon atoms. In some embodiments, −N(R')− bonds to two carbon atoms, wherein neither of the two carbon atoms are bond to any heteroatoms through a double bond. In some embodiments, −N(R')− bonds to two sp3 carbon atoms. In some embodiments, a staple comprises one or more −C(O)−N(R')− groups, wherein each R' is independently as described herein. In some embodiments, a staple comprises one or more carbamate groups, e.g., one or more −(O)−C(O)−N(R')−, wherein each R' is independently as described herein. In some embodiments, R' is −H. In some embodiments, R' is optionally substituted C_{1-6} aliphatic. In some embodiments, R' is optionally substituted C_{1-6} alkyl. In some embodiments, R' is C_{1-6}

$_{6}$ aliphatic. In some embodiments, R' is C_{1-6} alkyl. In some embodiments, R' is methyl.

[0106] In some embodiments, a stapled peptide comprise one or more staples. In some embodiments, a stapled peptide comprises one and no more than one staple. In some embodiments, a stapled peptide comprises two and no more than two staples. In some embodiments, two staples of a stapled peptide bond to a common backbone atom. In some embodiments, two staples of a stapled peptide bond to a common backbone atom which is an alpha carbon atom of an amino acid residue.

[0107] In some embodiments, peptides, e.g., staple peptides, of the present disclosure is or comprises a helix structure. As those skilled in the art will appreciate, helixes can have various lengths. In some embodiments, lengths of helixes range from 5 to 30 amino acid residues. In some embodiments, a length of a helix is 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20, or more, amino acid residues. In some embodiments, a length of a helix is 6 amino acid residues. In some embodiments, a length of a helix is 8 amino acid residues. In some embodiments, a length of a helix is 10 amino acid residues. In some embodiments, a length of a helix is 12 amino acid residues. In some embodiments, a length of a helix is 14 amino acid residues. In some embodiments, a length of a helix is 16 amino acid residues. In some embodiments, a length of a helix is 17 amino acid residues. In some embodiments, a length of a helix is 18 amino acid residues. In some embodiments, a length of a helix is 19 amino acid residues. In some embodiments, a length of a helix is 20 amino acid residues.

[0108] Amino acids stapled together can have various number of amino acid residues in between, e.g., 1-20, 1-15, 1-10, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, etc. In some embodiments, a staple is (i, i+4) which means there are three amino acid residues between the two amino acids (at positions i and i+4, respectively) that bond to the staple (at positions i+1, i+2, i+3, respectively). In some embodiments, a staple is (i, i+3). In some embodiments, a staple is (i, i+5). In some embodiments, a staple is (i, i+6). In some embodiments, a staple is (i, i+7). In some embodiments, a staple is (i, i+8). In some embodiments, a stapled peptide comprises two staples, one is (i, i+3) and the other is (i, i+7). In some embodiments, a stapled peptide comprises two staples, one is (i, i+3) and the other is (i, i+4). In some embodiments, a stapled peptide comprises two staples, one is (i, i+4) and the other is (i, i+7). In some embodiments, a stapled peptide comprises two staples, one is (i, i+3) and the other is (i, i+3). In some embodiments, a stapled peptide comprises two staples, one is (i, i+4) and the other is (i, i+4). In some embodiments, a stapled peptide comprises two staples, one is (i, i+7) and the other is (i, i+7). In some embodiments, the two staples are bonded to a common backbone atom, e.g., an alpha carbon atom of an amino acid residue.

[0109] In some embodiments, a stapled peptide comprises a staple which staple is L^s, wherein L^s is $-L^{s1}-L^{s2}-L^{s3}-$, each of L^{s1}, L^{s2}, and L^{s3} is independently L, wherein each L is independently as described in the present disclosure. In some embodiments, a provided staple is L^s.

[0110] In some embodiments, L^{s1} comprises at least one $-N(R')-$, wherein R' is as described in the

present disclosure. In some embodiments, the −N(R')− is bonded to two carbon atoms, wherein neither of the two carbon atoms forms a double bond with a heteroatom. In some embodiments, the −N(R')− is not bonded to −C(O)−. In some embodiments, the −N(R')− is not bonded to −C(S)−. In some embodiments, the −N(R')− is not bonded to −C(=NR')−. In some embodiments, L^{sl} is −L'−N(R')−, wherein L' is optionally substituted bivalent C_1-C_{19} aliphatic. In some embodiments, L^{sl} is −L'−N(CH_3)−, wherein L' is optionally substituted bivalent C_1-C_{19} aliphatic.

[0111] In some embodiments, R' is optionally substituted C_{1-6} alkyl. In some embodiments, R' is C_{1-6} alkyl. In some embodiments, R' is methyl. In some embodiments, the peptide backbone atom to which L^{sl} is bonded is also bonded to R^1, and R'and R^1 are both R and are taken together with their intervene atoms to form an optionally substituted ring as described in the present disclosure. In some embodiments, a formed ring has no additional ring heteroatoms in addition to the nitrogen atom to which R' is bonded. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered.

[0112] In some embodiments, L' is optionally substituted bivalent C_1-C_{20} aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_{19} aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_{15} aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_{10} aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_9 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_8 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_7 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_6 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_5 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_4 aliphatic. In some embodiments, L' is optionally substituted alkylene. In some embodiments, L' is optionally substituted alkenylene. In some embodiments, L' is unsubstituted alkylene. In some embodiments, L' is $-CH_2-$. In some embodiments, L' is $-(CH_2)_2-$. In some embodiments, L' is $-(CH_2)_3-$. In some embodiments, L' is $-(CH_2)_4-$. In some embodiments, L' is $-(CH_2)_5-$. In some embodiments, L' is $-(CH_2)_6-$. In some embodiments, L' is $-(CH_2)_7-$. In some embodiments, L' is $-(CH_2)_8-$. In some embodiments, L' is bonded to a peptide backbone atom. In some embodiments, L' is optionally substituted alkenylene. In some embodiments, L' is unsubstituted alkenylene. In some embodiments, L' is $-CH_2-CH=CH-CH_2-$.

[0113] In some embodiments, L' is optionally substituted phenylene.

[0114] In some embodiments, L^{sl} comprises at least one −N(R')C(O)−, wherein R' is as described in the present disclosure. In some embodiments, L^{sl} is −L'−N(R')C(O)−, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{sl} is −L'−N(CH_3)C(O)−, wherein L' is independently as described in the present disclosure.

[0115] In some embodiments, L^{s1} comprises at least one −C(O)O−. In some embodiments, L^{s1} comprises at least one −C(O)O−. In some embodiments, L^{s1} is −L'−C(O)O− or −L'−OC(O)−, wherein each L' is independently as described in the present disclosure. In some embodiments, L^{s1} is −L'−C(O)O−, wherein each L' is independently as described in the present disclosure. In some embodiments, L^{s1} is −L'−OC(O)−, wherein each L' is independently as described in the present disclosure.

[0116] In some embodiments, L^{s1} comprises at least one $-S(O)_2-N(R')-$, wherein R' is as described in the present disclosure. In some embodiments, L^{s1} comprises at least one $-S(O)_2-N(R')-$, wherein R' is as described in the present disclosure. In some embodiments, L^{s1} is $-L'-N(R')-S(O)_2-$ or $-L'-S(O)_2-N(R')-$, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{s1} is $-L'-N(R')-S(O)_2-$, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{s1} is $-L'-S(O)_2-N(R')-$, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{s1} is $-L'-N(CH_3)-S(O)_2-$ or $-L'-S(O)_2-N(CH_3)-$, wherein each L' is independently as described in the present disclosure. In some embodiments, L^{s1} is $-L'-N(CH_3)-S(O)_2-$, wherein L' is as described in the present disclosure. In some embodiments, L^{s1} is $-L'-S(O)_2-N(CH_3)-$, wherein L' is as described in the present disclosure.

[0117] In some embodiments, L^{s1} comprises at least one −O−. In some embodiments, L^{s1} is −L'−O−, wherein L' is independently as described in the present disclosure.

[0118] In some embodiments, L^{s1} is a covalent bond.

[0119] In some embodiments, L^{s1} is L', wherein L' is as described in the present disclosure.

[0120] In some embodiments, L^{s2} is L, wherein L is as described in the present disclosure. In some embodiments, L^{s2} is L', wherein L' is as described in the present disclosure. In some embodiments, L^{s2} comprises $-CH_2-CH=CH-CH_2-$. In some embodiments, L^{s2} is $-CH_2-CH=CH-CH_2-$. In some embodiments, L^{s2} comprises $-(CH_2)_4-$. In some embodiments, L^{s2} is $-(CH_2)_4-$.

[0121] In some embodiments, L^{s3} comprises at least one −N(R')−, wherein R' is as described in the present disclosure. In some embodiments, the −N(R')− is bonded to two carbon atoms, wherein neither of the two carbon atoms forms a double bond with a heteroatom. In some embodiments, the −N(R')− is not bonded to −C(O)−. In some embodiments, the −N(R')− is not bonded to −C(S)−. In some embodiments, the −N(R')− is not bonded to −C(=NR')−. In some embodiments, L^{s3} is −L'−N(R')−, wherein L' is optionally substituted bivalent C_1-C_{19} aliphatic. In some embodiments, L^{s3} is $-L'-N(CH_3)-$, wherein L' is optionally substituted bivalent C_1-C_{19} aliphatic.

[0122] In some embodiments, L^{s3} comprises at least one −N(R')C(O)−, wherein R' is as described in the present disclosure. In some embodiments, L^{s3} is −L'−N(R')C(O)−, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{s3} is $-L'-N(CH_3)C(O)-$,

wherein L' is independently as described in the present disclosure.

[0123] In some embodiments, L^{s3} comprises at least one −C(O)O−. In some embodiments, L^{s3} comprises at least one −C(O)O−. In some embodiments, L^{s3} is −L'−C(O)O− or −L'−OC(O)−, wherein each L' is independently as described in the present disclosure. In some embodiments, L^{s3} is −L'−C(O)O−, wherein each L' is independently as described in the present disclosure. In some embodiments, L^{s3} is −L'−OC(O)−, wherein each L' is independently as described in the present disclosure.

[0124] In some embodiments, L^{s3} comprises at least one $-S(O)_2-N(R')-$, wherein R' is as described in the present disclosure. In some embodiments, L^{s3} comprises at least one $-S(O)_2-N(R')-$, wherein R' is as described in the present disclosure. In some embodiments, L^{s3} is $-L'-N(R')-S(O)_2-$ or $-L'-S(O)_2-N(R')-$, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{s3} is $-L'-N(R')-S(O)_2-$, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{s3} is $-L'-S(O)_2-N(R')-$, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L^{s3} is $-L'-N(CH_3)-S(O)_2-$ or $-L'-S(O)_2-N(CH_3)-$, wherein each L' is independently as described in the present disclosure. In some embodiments, L^{s3} is $-L'-N(CH_3)-S(O)_2-$, wherein L' is as described in the present disclosure. In some embodiments, L^{s3} is $-L'-S(O)_2-N(CH_3)-$, wherein L' is as described in the present disclosure.

[0125] In some embodiments, L^{s3} comprises at least one −O−. In some embodiments, L^{s3} is −L'−O−, wherein L' is independently as described in the present disclosure.

[0126] In some embodiments, L^{s3} is L', wherein L' is as described in the present disclosure. In some embodiments, L^{s3} is optionally substituted alkylene. In some embodiments, L^{s3} is unsubstituted alkylene.

[0127] In some embodiments, L^{s} comprises at least one −N(R')−, wherein R' is as described in the present disclosure. In some embodiments, the −N(R')− is bonded to two carbon atoms, wherein neither of the two carbon atoms forms a double bond with a heteroatom. In some embodiments, the −N(R')− is not bonded to −C(O)−. In some embodiments, the −N(R')− is not bonded to −C(S)−. In some embodiments, the −N(R')− is not bonded to −C(=NR')−. In some embodiments, L^{s} comprises at least one −N(R')C(O)−, wherein R' is as described in the present disclosure.

[0128] In some embodiments, L^{s}, L^{s1}, L^{s2}, and L^{s3} each independently and optionally comprise a R' group, e.g., a R' group in $-C(R')_2-$, −N(R')−, etc., and the R' group is taken with a group (e.g., a group that can be R) attached to a backbone atom (e.g., R^{a1}, R^{a2}, R^{a3}, a R' group of L^{a1} or L^{a2} (e.g., a R' group in $-C(R')_2-$, −N(R')−, etc.), etc.) to form a double bond or an optionally substituted ring as two R groups can. In some embodiments, a formed ring is an optionally substituted 3-10 membered ring. In some embodiments, a formed ring is an optionally substituted 3-membered ring. In some embodiments, a formed ring is an optionally substituted 4-membered ring. In some embodiments, a formed ring is an

optionally substituted 5-membered ring. In some embodiments, a formed ring is an optionally substituted 6-membered ring. In some embodiments, a formed ring is monocyclic. In some embodiments, a formed ring is saturated. In some embodiments, a formed ring is partially unsaturated. In some embodiments, a formed ring is aromatic. In some embodiments, a formed ring comprises one or more ring heteroatom (e.g., nitrogen). In some embodiments, a staple, or L^s, L^{s1}, L^{s2}, and/or L^{s3} comprises −N(R')−, and the R' is taken together with a group attached to a backbone atom to form an optionally substituted ring as described herein. In some embodiments, a staple, or L^s, L^{s1}, L^{s2}, and/or L^{s3} comprises $-C(R')_2-$, and the R' is taken together with a group attached to a backbone atom to form an optionally substituted ring as described herein.

[0129] In some embodiments, a staple, or L^s, L^{s1}, L^{s2}, and/or L^{s3} comprises portions of one or more amino acid side chains (e.g., a side chain other than its terminal $=CH_2$).

[0130] As will be clear to those skilled in the art reading the present disclosure, the letter "L" is used to refer to a linker moiety as described herein; each $L^{superscript}$ (e.g., L^a, L^{s1}, L^{s2}, L^{s3}, L^s, etc.) therefore is understood, in some embodiments, to be L, unless otherwise specified.

[0131] In some embodiments, L comprises at least one −N(R')−, wherein R' is as described in the present disclosure. In some embodiments, the −N(R')− is bonded to two carbon atoms, wherein neither of the two carbon atoms forms a double bond with a heteroatom. In some embodiments, the −N(R')− is not bonded to −C(O)−. In some embodiments, the −N(R')− is not bonded to −C(S)−. In some embodiments, the −N(R')− is not bonded to −C(=NR')−. In some embodiments, L is −L'−N(R')−, wherein L' is optionally substituted bivalent C_1-C_{19} aliphatic. In some embodiments, L is $-L'-N(CH_3)-$, wherein L' is optionally substituted bivalent C_1-C_{19} aliphatic.

[0132] In some embodiments, L comprises at least one −N(R')C(O)−, wherein R' is as described in the present disclosure. In some embodiments, L is −L'−N(R')C(O)−, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L is $-L'-N(CH_3)C(O)-$, wherein L' is independently as described in the present disclosure.

[0133] In some embodiments, L comprises at least one −C(O)O−. In some embodiments, L comprises at least one −C(O)O−. In some embodiments, L is −L'−C(O)O− or −L'−OC(O)−, wherein each L' is independently as described in the present disclosure. In some embodiments, L is −L'−C(O)O−, wherein each L' is independently as described in the present disclosure. In some embodiments, L is −L'−OC(O)−, wherein each L' is independently as described in the present disclosure.

[0134] In some embodiments, L comprises at least one $-S(O)_2-N(R')-$, wherein R' is as described in the present disclosure. In some embodiments, L comprises at least one $-S(O)_2-N(R')-$, wherein R' is as described in the present disclosure. In some embodiments, L is $-L'-N(R')-S(O)_2-$ or $-L'-S(O)_2-N(R')-$, wherein each of L' and R' is independently as described in the present disclosure. In

some embodiments, L is −L'−N(R')−S(O)$_2$−, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L is −L'−S(O)$_2$−N(R')−, wherein each of L' and R' is independently as described in the present disclosure. In some embodiments, L is −L'−N(CH$_3$)−S(O)$_2$− or −L'−S(O)$_2$−N(CH$_3$)−, wherein each L' is independently as described in the present disclosure. In some embodiments, L is −L'−N(CH$_3$)−S(O)$_2$−, wherein L' is as described in the present disclosure. In some embodiments, L is −L'−S(O)$_2$−N(CH$_3$)−, wherein L' is as described in the present disclosure.

[0135] In some embodiments, L comprises at least one −O−. In some embodiments, L is −L'− O−, wherein L' is independently as described in the present disclosure.

[0136] In some embodiments, L is L', wherein L' is as described in the present disclosure. In some embodiments, L is optionally substituted alkylene. In some embodiments, L is unsubstituted alkylene.

[0137] In some embodiments, L is optionally substituted bivalent C$_1$-C$_{25}$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_{20}$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_{15}$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_{10}$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_9$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_8$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_7$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_6$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_5$ aliphatic. In some embodiments, L is optionally substituted bivalent C$_1$-C$_4$ aliphatic. In some embodiments, L is optionally substituted alkylene. In some embodiments, L is optionally substituted alkenylene. In some embodiments, L is unsubstituted alkylene. In some embodiments, L is −CH$_2$−. In some embodiments, L is −(CH$_2$)$_2$−. In some embodiments, L is −(CH$_2$)$_3$−. In some embodiments, L is −(CH$_2$)$_4$−. In some embodiments, L is −(CH$_2$)$_5$−. In some embodiments, L is −(CH$_2$)$_6$−. In some embodiments, L is −(CH$_2$)$_7$−. In some embodiments, L is −(CH$_2$)$_8$−. In some embodiments, L is bonded to a peptide backbone atom. In some embodiments, L is optionally substituted alkenylene. In some embodiments, L is unsubstituted alkenylene. In some embodiments, L is −CH$_2$−CH=CH−CH$_2$−.

[0138] In some embodiments, one end of a staple is connected to an atom A^{n1} of the peptide backbone, wherein A^{n1} is optionally substituted with R^1 and is an atom of an amino acid residue at amino acid position n^1 of the peptide from the N-terminus, and the other end is connected to an atom A^{n2} of the peptide backbone, wherein A^{n2} is optionally substituted with R^2 (in some embodiments, R^1 and/or R^2 is R which can be hydrogen) and is an atom of an amino acid residue at amino acid position n^2 of the peptide from the N-terminus, wherein each of n^1 and n^2 is independently an integer, and $n^2 = n^1 + m$, wherein m is 3-12.

[0139] In some embodiments, m is 3. In some embodiments, m is 4. In some embodiments, m is 5. In some embodiments, m is 6. In some embodiments, m is 7. In some embodiments, m is 8. In some

embodiments, m is 9. In some embodiments, m is 10. In some embodiments, m is 11. In some embodiments, a staple is referred to a (i, i+m) staple.

[0140] In some embodiments, A^{n1} is a carbon atom. In some embodiments, A^{n1} is achiral. In some embodiments, A^{n1} is chiral. In some embodiments, A^{n1} is *R*. In some embodiments, A^{n1} is *S*.

[0141] In some embodiments, A^{n2} is a carbon atom. In some embodiments, A^{n2} is achiral. In some embodiments, A^{n2} is chiral. In some embodiments, A^{n2} is *R*. In some embodiments, A^{n2} is *S*.

[0142] In some embodiments, A^{n1} is achiral and A^{n2} is achiral. In some embodiments, A^{n1} is achiral and A^{n2} is R. In some embodiments, A^{n1} is achiral and A^{n2} is S. In some embodiments, A^{n1} is R and A^{n2} is achiral. In some embodiments, A^{n1} is R and A^{n2} is R. In some embodiments, A^{n1} is R and A^{n2} is S. In some embodiments, A^{n1} is S and A^{n2} is achiral. In some embodiments, A^{n1} is S and A^{n2} is R. In some embodiments, A^{n1} is S and A^{n2} is S.

[0143] In some embodiments, provided stereochemistry at staple-backbone connection points and/or combinations thereof, optionally together with one or more structural elements of provided peptide, *e.g.*, staple chemistry (hydrocarbon, non-hydrocarbon), staple length, *etc.* can provide various benefits, such as improved preparation yield, purity, and/or selectivity, improved properties (*e.g.*, improved solubility, improved stability, lowered toxicity, improved selectivities, *etc.*), improved activities, *etc.* In some embodiments, provided stereochemistry and/or stereochemistry combinations are different from those typically used, *e.g.*, those of US 9617309, US 2015-0225471, US 2016-0024153, US 2016-0215036, US 2016-0244494, WO 2017/062518, and provided one or more of benefits described in the present disclosure.

[0144] In some embodiments, a staple can be of various lengths, in some embodiments, as represent by the number of chain atoms of a staple. In some embodiments, a chain of a staple is the shortest covalent connection in the staple from a first end (connection point with a peptide backbone) of a staple to a second end of the staple, wherein the first end and the second end are connected to two different peptide backbone atoms. In some embodiments, a staple comprises 5-30 chain atoms, *e.g.*, 5-20, 5-15, 5, 6, 7, 8, 9, or 10 to 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, or 25 chain atoms. In some embodiments, a staple comprises 5 chain atoms. In some embodiments, a staple comprises 6 chain atoms. In some embodiments, a staple comprises 7 chain atoms. In some embodiments, a staple comprises 8 chain atoms. In some embodiments, a staple comprises 9 chain atoms. In some embodiments, a staple comprises 10 chain atoms. In some embodiments, a staple comprises 11 chain atoms. In some embodiments, a staple comprises 12 chain atoms. In some embodiments, a staple comprises 13 chain atoms. In some embodiments, a staple comprises 14 chain atoms. In some embodiments, a staple comprises 15 chain atoms. In some embodiments, a staple comprises 16 chain atoms. In some embodiments, a staple comprises 17 chain atoms. In some embodiments, a staple comprises 18 chain atoms. In some

embodiments, a staple comprises 19 chain atoms. In some embodiments, a staple comprises 20 chain atoms. In some embodiments, a staple has a length of 5 chain atoms. In some embodiments, a staple has a length of 6 chain atoms. In some embodiments, a staple has a length of 7 chain atoms. In some embodiments, a staple has a length of 8 chain atoms. In some embodiments, a staple has a length of 9 chain atoms. In some embodiments, a staple has a length of 10 chain atoms. In some embodiments, a staple has a length of 11 chain atoms. In some embodiments, a staple has a length of 12 chain atoms. In some embodiments, a staple has a length of 13 chain atoms. In some embodiments, a staple has a length of 14 chain atoms. In some embodiments, a staple has a length of 15 chain atoms. In some embodiments, a staple has a length of 16 chain atoms. In some embodiments, a staple has a length of 17 chain atoms. In some embodiments, a staple has a length of 18 chain atoms. In some embodiments, a staple has a length of 19 chain atoms. In some embodiments, a staple has a length of 20 chain atoms. In some embodiments, a staple has a length of 8-15 chain atoms. In some embodiments, a staple has 8-12 chain atoms. In some embodiments, a staple has 9-12 chain atoms. In some embodiments, a staple has 9-10 chain atoms. In some embodiments, a staple has 8-10 chain atoms. In some embodiments, length of a staple can be adjusted according to the distance of the amino acid residues it connects, for example, a longer staple may be utilized for a (i, i+7) staple than a (i, i+4) or (i, i+3) staple. In some embodiments, a (i, i+3) staple has about 5-10, 5-8, e.g., about 5, 6, 7, 8, 9 or 10 chain atoms. In some embodiments, a (i, i+3) staple has 5 chain atoms. In some embodiments, a (i, i+3) staple has 6 chain atoms. In some embodiments, a (i, i+3) staple has 7 chain atoms. In some embodiments, a (i, i+3) staple has 8 chain atoms. In some embodiments, a (i, i+3) staple has 9 chain atoms. In some embodiments, a (i, i+3) staple has 10 chain atoms. In some embodiments, a (i, i+4) staple has about 5-12, 5-10, 7-12, 5-8, e.g., about 5, 6, 7, 8, 9, 10, 11 or 12 chain atoms. In some embodiments, a (i, i+4) staple has 5 chain atoms. In some embodiments, a (i, i+4) staple has 6 chain atoms. In some embodiments, a (i, i+4) staple has 7 chain atoms. In some embodiments, a (i, i+4) staple has 8 chain atoms. In some embodiments, a (i, i+4) staple has 9 chain atoms. In some embodiments, a (i, i+4) staple has 10 chain atoms. In some embodiments, a (i, i+4) staple has 11 chain atoms. In some embodiments, a (i, i+4) staple has 12 chain atoms. In some embodiments, a (i, i+7) staple has about 8-25, 10-25, 10-16, 12-15, e.g., about 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, or 25 chain atoms. In some embodiments, a (i, i+7) staple has 8 chain atoms. In some embodiments, a (i, i+7) staple has 9 chain atoms. In some embodiments, a (i, i+7) staple has 10 chain atoms. In some embodiments, a (i, i+7) staple has 11 chain atoms. In some embodiments, a (i, i+7) staple has 12 chain atoms. In some embodiments, a (i, i+7) staple has 13 chain atoms. In some embodiments, a (i, i+7) staple has 14 chain atoms. In some embodiments, a (i, i+7) staple has 15 chain atoms. In some embodiments, a (i, i+7) staple has 16 chain atoms. In some embodiments, a (i, i+7) staple has 17 chain atoms. In some embodiments, a (i, i+7) staple has 18 chain atoms. In some

embodiments, a (i, i+7) staple has 19 chain atoms. In some embodiments, a (i, i+7) staple has 20 chain atoms. In some embodiments, a (i, i+7) staple has 21 chain atoms. In some embodiments, a (i, i+7) staple has 22 chain atoms. In some embodiments, a stapled peptide has two staples, each of which is independently such a (i, i+3), (i, i+4) or (i, i+7) staple. In some embodiments, a stapled peptide has such a (i, i+3) staple and such a (i, i+7) staple. In some embodiments, a stapled peptide has such a (i, i+4) staple and such a (i, i+7) staple.

[0145] Staple lengths may be otherwise described. For example, in some embodiments, staple lengths may be described as the total number of chain atoms and non-chain ring atoms, where a non-chain ring atom is an atom of the staple which forms a ring with one or more chain atoms but is not a chain atom in that it is not within the shortest covalent connection from a first end of the staple to a second end of the staple. In some embodiments, staples formed using Monomer A (which comprises an azetidine moiety), Monomer B (which comprises a pyrrolidine moiety), and/or Monomer C (which comprises a pyrrolidine moiety), etc., may comprise one or two non-chain ring atoms.

[0146] In some embodiments, a staple has no heteroatoms in its chain. In some embodiments, a staple comprises at least one heteroatom in its chain. In some embodiments, a staple comprises at least one nitrogen atom in its chain.

[0147] In some embodiments, a staple is L^s, wherein L^s is an optionally substituted, bivalent C_{8-14} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, a staple is L^s, wherein L^s is an optionally substituted, bivalent C_{9-13} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, a staple is L^s, wherein L^s is an optionally substituted, bivalent C_{10-15} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, a staple is L^s, wherein L^s is an optionally substituted, bivalent C_{11-14} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, a staple is a (i, i+3) staple in that not including the two amino acid residues that are directly connected to the staple, there are two amino acid residues between the two

amino acid residues that are directly connected to the staple. In some embodiments, a staple is a (i, i+4) staple in that not including the two amino acid residues that are directly connected to the staple, there are three amino acid residues between the two amino acid residues that are directly connected to the staple. In some embodiments, a staple is a (i, i+7) staple in that not including the two amino acid residues that are directly connected to the staple, there are six amino acid residues between the two amino acid residues that are directly connected to the staple.

[0148] In some embodiments, for each of L^s, L^{s1}, L^{s2}, and L^{s3}, any replacement of methylene units, if any, is replaced with −N(R')−, −C(O)−N(R')−, −N(R')C(O)O−, −C(O)O−, −$S(O)_2$N(R')−, or −O−. In some embodiments, for each of L^s, L^{s1}, L^{s2}, and L^{s3}, any replacement of methylene units, if any, is replaced with −N(R')−, −N(R')−C(O)−, or −N(R')C(O)O−. In some embodiments, for each of L^s, L^{s1}, L^{s2}, and L^{s3}, any replacement of methylene units, if any, is replaced with −N(R')− or −N(R')C(O)O−. In some embodiments, for each of L^s, L^{s1}, L^{s2}, and L^{s3}, any replacement of methylene units, if any, is replaced with −N(R')−. In some embodiments, for each of L^s, L^{s1}, L^{s2}, and L^{s3}, any replacement of methylene units, if any, is replaced with −N(R')C(O)O−.

[0149] In some embodiments, a staple comprises a double bond. In some embodiments, a staple comprises a double bond may be formed by olefin metathesis of two olefins. In some embodiments, staples are formed by metathesis reactions, e.g., involving one or more double bonds in amino acid residues as described herein. In some embodiments, a first amino acid residue comprising an olefin (e.g., AA1−CH=CH_2) and a second amino acid residue comprising an olefin (e.g., AA2−CH=CH_2) are stapled (e.g., forming AA1−CH=CH−AA2, wherein AA1 and AA2 are typically linked through one or more amino acid residues). In some embodiments, an olefin, e.g., in a staple, is converted into −CHR'−CHR'−, wherein each R' is independently as described herein. In some embodiments, R' is R as described herein. In some embodiments, R' is −H. In some embodiments, each R' is −H. In some embodiments, R' is −OR, wherein R is as described herein. In some embodiments, R' is −OH. In some embodiments, R' is −$N(R)_2$ wherein each R is independently as described herein. In some embodiments, R' is −SR wherein R is as described herein. In some embodiments, R' is R wherein R is optionally substituted aliphatic, e.g., C_{1-10} aliphatic. In some embodiments, R' is R wherein R is optionally substituted aliphatic, e.g., C_{1-10} alkenyl. In some embodiments, R' is R wherein R is optionally substituted aliphatic, e.g., C_{1-10} alkynyl. In some embodiments, −CHR'−CHR'− is −CH_2−CH_2−. In some embodiments, each of the two olefins is independently of a side chain of an amino acid residue. In some embodiments, each olefin is independently a terminal olefin. In some embodiments, each olefin is independently a mono-substituted olefin.

[0150] In some embodiments, a suitable amino acid for stapling has structure of formula A-II:

$$NH(R^{a1})-L^{a1}-C(-L^{a}-CH=CH_2)(R^{a3})-L^{a2}-COOH,$$

A-II

or a salt thereof, wherein each variable is independently as described in the present disclosure.

[0151] In some embodiments, an amino acid of formula A-I is a compound having the structure of formula **A-III**:

$$NH(R^{a1})-C(-L^{a}-CH=CH_2)(R^{a3})-COOH,$$

A-III

or a salt thereof, wherein each variable is independently as described in the present disclosure.

[0152] In some embodiments, an amino acid of formula A-I or a salt thereof has structure of formula A-IV:

$$NH(R^{a1})-L^{a1}-C(-L^{a}-COOH)(R^{a3})-L^{a2}-COOH,$$

A-IV

or a salt thereof, wherein each variable is independently as described in the present disclosure. In some embodiments, an amino acid suitable for stapling has the structure of formula A-IV or a salt thereof, wherein each variable is independently as described in the present disclosure.

[0153] In some embodiments, an amino acid has structure of formula A-V:

$$NH(R^{a1})-L^{a1}-C(-L^{a}-R^{SP1})(R^{a3})-L^{a2}-COOH,$$

A-V

or a salt thereof, wherein each variable is independently as described in the present disclosure. In some embodiments, an amino acid suitable for stapling has the structure of formula A-V or a salt thereof, wherein each variable is independently as described in the present disclosure.

[0154] In some embodiments, an amino acid for stapling has structure of formula A-VI:

$$NH(R^{a1})-L^{a1}-C(-L^{a}-R^{SP1})(-L^{a}-R^{SP2})-L^{a2}-COOH,$$

A-VI

or a salt thereof, wherein each variable is independently as described in the present disclosure. In some embodiments, an amino acid suitable for stapling has the structure of formula A-VI or a salt thereof, wherein each variable is independently as described in the present disclosure.

[0155] As used herein, each of R^{SP1} and R^{SP2} independently comprises a reactive group. In some embodiments, each of R^{SP1} and R^{SP2} is independently a reactive group. In some embodiments, a reactive group is optionally substituted $-CH=CH_2$. In some embodiments, a reactive group is $-CH=CH_2$. In some embodiments, a reactive group is an amino group, e.g., $-NHR$, wherein R is as described herein. In some embodiments, a reactive group is an acid group. In some embodiments, a reactive group is $-COOH$ or an activated form thereof. In some embodiments, a reactive group is for a cycloaddition reaction (e.g., [3+2], [4+2], etc.), e.g., an alkene, an alkyne, a diene, a 1,3-dipole (e.g., $-N_3$), etc. In some embodiments, a reactive group is optionally substituted $-C\equiv CH$. In some embodiments, a reactive group is $-C\equiv CH$. In

some embodiments, a reactive group is $-N_3$.

[0156] In some embodiments, R^{SP1} or R^{SP2} of a first amino acid residue and R^{SP1} or R^{SP2} of a second amino acid residue can react with each other so that the two amino acid residues are connected with a staple. In some embodiments, a reactive is olefin metathesis between two olefin, e.g., two $-CH=CH_2$. In some embodiments, a reaction is amidation and one reactive group is an amino group, e.g., $-NHR$ wherein R is as described herein (e.g., in some embodiments, R is $-H$; in some embodiments, R is optionally substituted C_{1-6} aliphatic), and the other is an acid group (e.g., $-COOH$) or an activated form thereof. In some embodiments, a reaction is a cycloaddition reaction, e.g., [4+2], [3+2], etc. In some embodiments, a first and a second reactive groups are two reactive groups suitable for a cycloaddition reaction. In some embodiments, a reaction is a click reaction. In some embodiments, one reaction group is or comprises $-N_3$, and the other is or comprises an alkyne, e.g., a terminal alkyne or a activated/strained alkyne. In some embodiments, the other is or comprises $-C\equiv CH$.

[0157] In some embodiments, R^{SP1} or R^{SP2} of a first amino acid residue and R^{SP1} or R^{SP2} of a second amino acid residue can react with a reagent so that the two are connected to form a staple. In some embodiments, a reagent comprises two reactive groups, one of which reacts with R^{SP1} or R^{SP2} of a first amino acid residue, and the other reacts with R^{SP1} or R^{SP2} of a first amino acid residue. In some embodiments, R^{SP1} or R^{SP2} of both amino acid residues are the same or the same type, e.g., both are amino groups, and the two reactive groups of a linking reagent are also the same, e.g., both are acid groups such as $-COOH$ or activated form thereof. In some embodiments, R^{SP1} or R^{SP2} of both amino acid residues are both acid groups, e.g., $-COOH$ or activated form thereof, and both reactive groups of a linking agent are amino groups. In some embodiments, R^{SP1} or R^{SP2} of both amino acid residues are both nucleophilic groups, e.g., $-SH$, and both reactive groups of a linking reagent are electrophilic (e.g., carbon attached to leaving groups such as $-Br$, $-I$, etc.).

[0158] In some embodiments, R^{SP1} and R^{SP2} are the same. In some embodiments, R^{SP1} and R^{SP2} are different. In some embodiments, R^{SP1} is or comprises $-CH=CH_2$. In some embodiments, R^{SP1} is or comprises $-COOH$. In some embodiments, R^{SP1} is or comprises an amino group. In some embodiments, R^{SP1} is or comprises $-NHR$. In some embodiments, R is hydrogen or optionally substituted C_{1-6} aliphatic. In some embodiments, R^{SP1} is or comprises $-NH_2$. In some embodiments, R^{SP1} is or comprises $-N_3$. In some embodiments, R^{SP2} is or comprises $-CH=CH_2$. In some embodiments, R^{SP2} is or comprises $-COOH$. In some embodiments, R^{SP2} is or comprises an amino group. In some embodiments, R^{SP2} is or comprises $-NHR$. In some embodiments, R is hydrogen or optionally substituted C_{1-6} aliphatic. In some embodiments, R^{SP2} is or comprises $-NH_2$. In some embodiments, R^{SP2} is or comprises $-N_3$.

[0159] In some embodiments, each amino acid residue of a pair of amino acid residues is independently a residue of an amino acid of formula A-II or A-III or a salt thereof. In some

embodiments, such a pair of amino acid residues is stapled, e.g., through olefin metathesis. In some embodiments, a staple has the structure of $-L^a-CH=CH-L^a-$, wherein each variable is independently as described herein. In some embodiments, olefin in a staple is reduced. In some embodiments, In some embodiments, a staple has the structure of $-L^a-CH_2-CH_2-L^a-$, wherein each variable is independently as described herein. In some embodiments, one L^a is L^{s1} as described herein, and one L^a is L^{s3} as described herein.

[0160] In some embodiments, each amino acid residue of a pair of amino acid residues is independently a residue of an amino acid of formula A-II or A-III or a salt thereof. In some embodiments, such a pair of amino acid residues is stapled, e.g., through olefin metathesis. In some embodiments, a staple has the structure of $-L^a-CH=CH-L^a-$, wherein each variable is independently as described herein. In some embodiments, olefin in a staple is reduced. In some embodiments, In some embodiments, a staple has the structure of $-L^a-CH_2-CH_2-L^a-$, wherein each variable is independently as described herein. In some embodiments, one L^a is L^{s1} as described herein, and one L^a is L^{s3} as described herein.

[0161] In some embodiments, two amino acid residues, e.g., of amino acids independently of formula A-I or a salt of, connected by a staple have the structure of $-N(R^{a1})-L^{a1}-C(-L^s-R^{AA})(R^{a3})-L^{a2}-CO-$, wherein each variable is independently as described herein, and R^{AA} is an amino acid residue. In some embodiments, two amino acid residues, e.g., of amino acids independently of formula A-I or a salt of, connected by a staple have the structure of $-N(-L^s-R^{AA})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-CO-$, wherein each variable is independently as described herein, and R^{AA} is an amino acid residue. In some embodiments, two amino acid residues, e.g., of amino acids independently of formula A-I or a salt of, connected by a staple have the structure of $R^{a1}-N(-L^s-R^{AA})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-CO-$, wherein each variable is independently as described herein, and R^{AA} is an amino acid residue. In some embodiments, three amino acid residues, e.g., of amino acids independently of formula A-I or a salt of, connected by two staples have the structure of $R^{a1}-N(-L^s-R^{AA})-L^{a1}-C(-L^s-R^{AA})(R^{a3})-L^{a2}-CO-$, wherein each variable is independently as described herein, and R^{AA} is an amino acid residue. In some embodiments, three amino acid residues, e.g., of amino acids independently of formula A-I or a salt of, connected by two staples have the structure of $-N(-L^s-R^{AA})-L^{a1}-C(-L^s-R^{AA})(R^{a3})-L^{a2}-CO-$, wherein each variable is independently as described herein, and R^{AA} is an amino acid residue. In some embodiments, three amino acid residues, e.g., of amino acids independently of formula A-I or a salt of, connected by two staples (e.g., X^4 stapled with both X^1 and X^{14}) have the structure of $-N(R^{a1})-L^{a1}-C(-L^s-R^{AA})(-L^s-R^{AA})-L^{a2}-CO-$, wherein each variable is independently as described herein, and R^{AA} is an amino acid residue. In some embodiments, each R^{AA} is independently a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt

thereof. In some embodiments, R^{AA} is $-C(R^{a3})[-L^{a1}-N(R^{a1})-](-L^{a2}-CO-)$, wherein each variable is independently as described herein. In some embodiments, R^{AA} is $-C(R^{a3})[-N(R^{a1})-](-CO-)$, wherein each variable is independently as described herein. In some embodiments, each R^{AA} is independently $-N(-)[-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-CO-]$, wherein each variable is independently as described herein, wherein $-C(-)(R^{a3})-$ is bonded to a staple. In some embodiments, each R^{AA} is independently $-N(-)[-C(R^{a2})(R^{a3})-CO-]$, wherein each variable is independently as described herein, wherein $-C(-)(R^{a3})-$ is bonded to a staple. In some embodiments, each R^{AA} is independently $R^{a1}-N(-)[-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-CO-]$, wherein each variable is independently as described herein, wherein $-C(-)(R^{a3})-$ is bonded to a staple. In some embodiments, each R^{AA} is independently $R^{a1}-N(-)[-C(R^{a2})(R^{a3})-CO-]$, wherein each variable is independently as described herein, wherein $-C(-)(R^{a3})-$ is bonded to a staple.

[0162] Various staples, e.g., L^s, are as described herein. In some embodiments, L^s is $-L^{s1}-L^{s2}-L^{s3}-$ as described herein. In some embodiments, L^{s1} is L^a as described herein. In some embodiments, L^{s3} is L^a as described herein. In some embodiments, L^{s1} is L^a of a first of two stapled amino acid residues. In some embodiments, L^{s2} is L^a of a second of two stapled amino acid residues. In some embodiments, L^{s2} is or comprises a double bond. In some embodiments, L^{s2} is or comprises $-CH=CH-$. In some embodiments, L^{s2} is or comprises optionally substituted $-CH_2-CH_2-$. In some embodiments, L^{s2} is or comprises $-CH_2-CH_2-$. In some embodiments, L^{s2} is or comprises $-C(O)N(R')-$ (e.g., a staple formed by two amino acid residues one of which has a R^{SP1} group that is or comprises an amino group and the other of which has a R^{SP2} group that is or comprises $-COOH$). In some embodiments, L^{s2} is or comprises $-C(O)NH-$. In some embodiments, each of L^{s1} and L^{s3} is independently optionally substituted linear or branched C_{1-10} hydrocarbon chain. In some embodiments, each of L^{s1} and L^{s3} is independently $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L^{s1} is $-CH_2-$. In some embodiments, L^{s3} is $-(CH_2)_3-$.

[0163] In some embodiments, L^s is $-CH_2-CH=CH-(CH_2)_3-$. In some embodiments, L^s is $-(CH_2)_6-$.

[0164] In some embodiments, L^s is $-(CH_2)_2-C(O)NH-(CH_2)_4-$.

[0165] In some embodiments, L^s is bonded to two backbone carbon atoms. In some embodiments, L^s is bonded to two alpha carbon atoms of two stapled amino acid residues. In some embodiments, L^s is bonded to a backbone nitrogen atom and a backbone carbon atom (e.g., an alpha carbon).

[0166] In some embodiments, L^a comprises at least one $-N(R')-$ wherein R' is independently as described in the present disclosure. In some embodiments, L^a comprises $-L^{am1}-N(R')-$ wherein R' is independently as described in the present disclosure, and L^{am1} is as described herein. In some embodiments, L^a is or comprises $-L^{am1}-N(R')-L^{am2}-$, wherein each of L^{am1}, R', and L^{am2} is independently as described herein. In some embodiments, R' is optionally substituted C_{1-6} aliphatic. In some embodiments, R' is methyl. In some embodiments, R' is taken together with R^{a3} to form an optionally

substituted ring as described herein. In some embodiments, a formed ring is a 3-10 membered monocyclic saturated ring as described herein. In some embodiments, a formed ring has no additional heteroatom ring atom in addition to the nitrogen of −N(R')−. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered.

[0167] In some embodiments, L^a comprises at least one $-C(R')_2-$ wherein each R' is independently as described in the present disclosure. In some embodiments, L^a comprises $-L^{am1}-C(R')_2-$ wherein R' is independently as described in the present disclosure, and L^{am1} is as described herein. In some embodiments, L^a is or comprises $-L^{am1}-C(R')_2-L^{am2}-$, wherein each of L^{am1}, R', and L^{am2} is independently as described herein. In some embodiments, R' is −H. In some embodiments, $-C(R')_2-$ is optionally substituted $-CH_2-$. In some embodiments, $-C(R')_2-$ is $-CH_2-$. In some embodiments, one R' is taken together with R^{a3} to form an optionally substituted ring as described herein. In some embodiments, a formed ring is a 3-10 membered monocyclic saturated ring as described herein. In some embodiments, a formed ring has no additional heteroatom ring atom in addition to the nitrogen of −N(R')−. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered.

[0168] As described herein, each of L^{am1} and L^{am2} is independently L^{am} as described herein. As described herein, L^{am} is a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−. In some embodiments, L^{am} is a covalent bond. In some embodiments, L^{am} is an optionally substituted bivalent C_1-C_{10} aliphatic group. In some embodiments, L^{am} is an optionally substituted bivalent linear C_1-C_{10} aliphatic group. In some embodiments, L^{am} is optionally substituted C_{1-10} alkylene. In some embodiments, L^{am} is C_{1-10} alkylene. In some embodiments, L^{am} is optionally substituted linear C_{1-10} alkylene. In some embodiments, L^{am} is optionally substituted $-CH_2-$. In some embodiments, L^{am} is $-CH_2-$.

[0169] In some embodiments, L^{am1} is a covalent bond. In some embodiments, L^{am1} is an optionally substituted bivalent C_1-C_{10} aliphatic group. In some embodiments, L^{am1} is an optionally substituted bivalent linear C_1-C_{10} aliphatic group. In some embodiments, L^{am1} is optionally substituted C_{1-10} alkylene. In some embodiments, L^{am1} is C_{1-10} alkylene. In some embodiments, L^{am1} is optionally substituted linear C_{1-10} alkylene. In some embodiments, L^{am1} is optionally substituted $-CH_2-$. In some embodiments, L^{am1} is $-CH_2-$. In some embodiments, L^{am1} is bonded to a backbone atom. In some embodiments, L^{am1} is

bonded to an alpha-carbon of an amino acid.

[0170] In some embodiments, L^{am2} is a covalent bond. In some embodiments, L^{am2} is an optionally substituted bivalent C_1-C_{10} aliphatic group. In some embodiments, L^{am2} is an optionally substituted bivalent linear C_1-C_{10} aliphatic group. In some embodiments, L^{am2} is optionally substituted C_{1-10} alkylene. In some embodiments, L^{am2} is C_{1-10} alkylene. In some embodiments, L^{am2} is optionally substituted linear C_{1-10} alkylene. In some embodiments, L^{am2} is optionally substituted $-CH_2-$. In some embodiments, L^{am2} is $-CH_2-$. In some embodiments, L^{am2} is or comprises $-C(O)-$. In some embodiments, $-C(O)-$ is bonded to a nitrogen atom. In some embodiments, L^{am2} is or comprises $-S(O)_2-$. In some embodiments, $-S(O)_2-$ is bonded to a nitrogen atom. In some embodiments, L^{am2} is or comprises $-O-$. In some embodiments, L^{am2} is or comprises $-C(O)-O-$. In some embodiments, $-C(O)-O-$ is bonded to a nitrogen atom. In some embodiments, L^{am2} is bonded to a nitrogen atom, and it comprises a $-C(O)-$ group which is bonded to the nitrogen atom. In some embodiments, L^{am2} is bonded to a nitrogen atom, and it comprises a $-C(O)-O-$ group which is bonded to the nitrogen atom. In some embodiments, L^{am2} is or comprises $-C(O)-O-CH_2-$, wherein the $-CH_2-$ is optionally substituted. In some embodiments, L^{am2} is $-C(O)-O-CH_2-$.

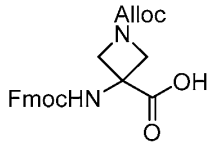
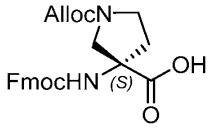
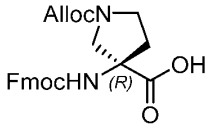
[0171] In some embodiments, L^a is L^{s1} as described herein. In some embodiments, L^a is L^{s2} as described herein.

[0172] In some embodiments, R^{a3} is $-L^a-CH=CH_2$, wherein L^a is independently as described herein. In some embodiments, each of R^{a2} and R^{a3} independently comprises a double bond, e.g., a terminal olefin which can be optionally and independently stapled with another residue comprising an olefin. In some embodiments, each of R^{a2} and R^{a3} are independently $-L^a-CH=CH_2$. In some embodiments, an amino acid are stapled with two amino acid residues independently through R^{a2} and R^{a3}. In some embodiments, such an amino acid is B5.

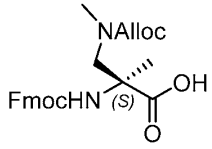
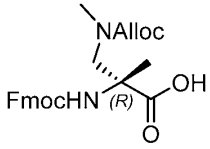
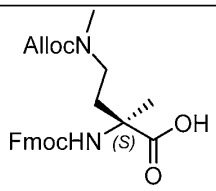
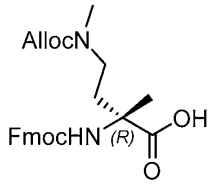
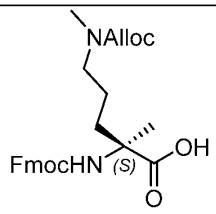
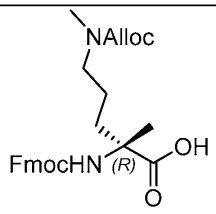
[0173] In some embodiments, an amino acid is selected from Tables A-I, A-II, A-III (may be presented as Fmoc-protected). As appreciated by those skilled in the art, among other things, when incorporated into peptides, Fmoc-protected amino groups and carboxyl groups may independently form amide connections with other amino acid residues (or N- or C-terminus capping groups, or exist as N- or C-terminus amino or carboxyl groups). Olefins, including those in Alloc groups, may be utilized to form staples through olefin metathesis. Staples comprising olefins may be further modified, e.g., through hydrogenation to convert olefin double bonds into single bonds, and/or through CO_2 extrusion to convert carbamate moieties (e.g., $-O-(CO)-N(R')-$) into amine moieties (e.g., $-N(R')-$). In some embodiments, an agent is or comprises a stapled peptide (e.g., a stapled peptide described according to Table E3) or a salt thereof, in which stapled peptide each double bond is converted into a single bond. In some embodiments, a conversion is achieved through hydrogenation which adds a $-H$ to each olefin carbon

atom. In some embodiments, an olefin double bond is replaced with −CHR'−CHR'−, wherein each R' is independently as described herein. In some embodiments, R' is R as described herein. In some embodiments, R' is −H. In some embodiments, each R' is −H. In some embodiments, R' is −OR, wherein R is as described herein. In some embodiments, R' is −OH. In some embodiments, R' is $-N(R)_2$ wherein each R is independently as described herein. In some embodiments, R' is −SR wherein R is as described herein. In some embodiments, R' is R wherein R is optionally substituted aliphatic, e.g., C_{1-10} aliphatic. In some embodiments, R' is R wherein R is optionally substituted aliphatic, e.g., C_{1-10} alkenyl. In some embodiments, R' is R wherein R is optionally substituted aliphatic, e.g., C_{1-10} alkynyl. In some embodiments, −CHR'−CHR'− is $-CH_2-CH_2-$.

[0174] Table A-I. Exemplary amino acids (Fmoc-Protected).

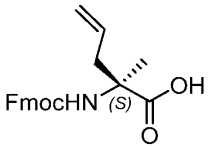
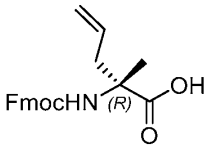
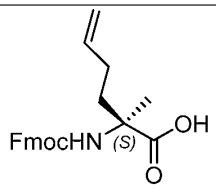
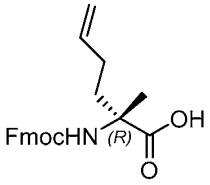
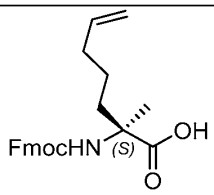
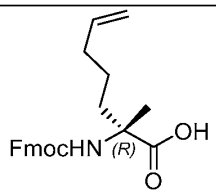
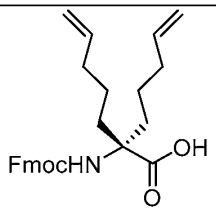
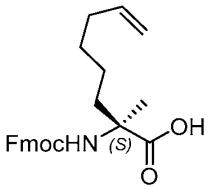
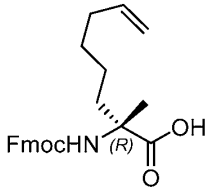
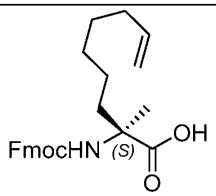
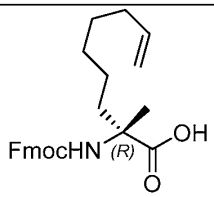
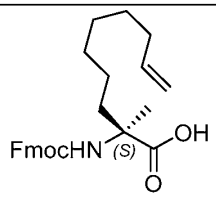
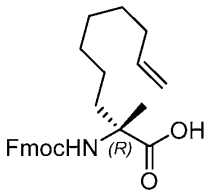
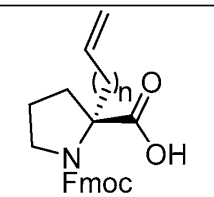
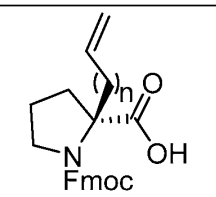
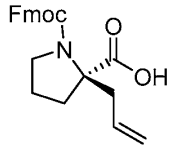
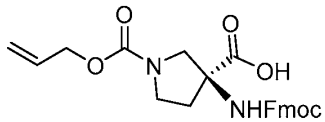
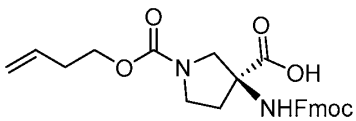
Monomer A (M_A)	Monomer B (M_B)	Monomer C (M_C)
		

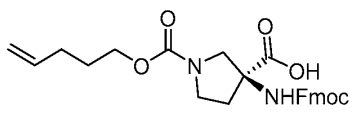
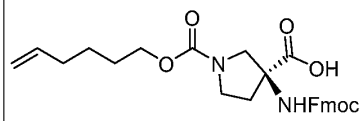
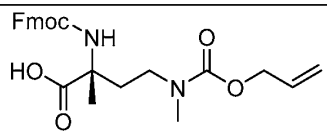
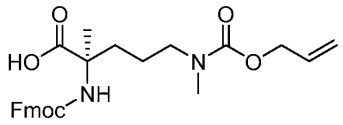
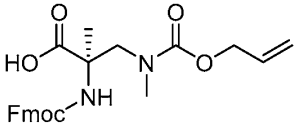
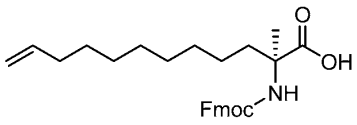
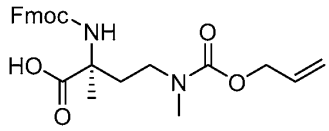
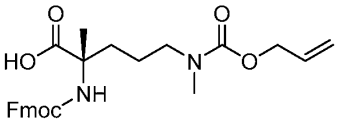
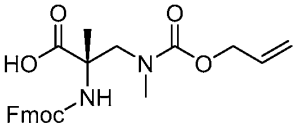
[0175] Table A-II. Exemplary amino acids (Fmoc-Protected).

Monomer D (M_D)	Monomer E (M_E)	Monomer F (M_F)
		
Monomer G (M_G)	**Monomer H (M_H)**	**Monomer I (M_I)**
		

[0176] Table A-III. Exemplary amino acids (Fmoc-Protected).

S_3	R_3	S_4

		
R_4	S_5	R_5
		
B_5	S_6	R_6
		
S_7	R_7	S_8
		
R_8		
	 n is 1-5, e.g., 1, 2 or 3	 n is 1-5, e.g., 1, 2 or 3
PL3	PyrS	PyrS1
		

PyrS2	PyrS3	RdN
		
ReN	**RgN**	**S_{10}**
		
SdN	**SeN**	**SgN**
		

[0177] In some embodiments, an amino acid is an alpha-amino acid. In some embodiments, an amino acid is an L-amino acid. In some embodiments, an amino acid is a D-amino acid. In some embodiments, the alpha-carbon of an amino acid is achiral. In some embodiments, an amino acid is a beta-amino acid. In some embodiments, an amino acid is a gamma-amino acid.

[0178] In some embodiments, a provided amino acid sequence contains two or more amino acid residues whose side chains are linked together to form one or more staples. In some embodiments, a provided amino acid sequence contains two or more amino acid residues, each of which independently has a side chain comprising an olefin. In some embodiments, a provided amino acid sequence contains two or more amino acid residues, each of which independently has a side chain comprising a terminal olefin. In some embodiments, a provided amino acid sequence contains two and no more than two amino acid residues, each of which independently has a side chain comprising an olefin. In some embodiments, a provided amino acid sequence contains two and no more than two amino acid residues, each of which independently has a side chain comprising a terminal olefin. In some embodiments, a provided amino acid sequence comprises at least one residue of an amino acid that comprises an olefin and a nitrogen atom other than the nitrogen atom of its amino group. In some embodiments, a provided amino acid sequence comprises at least one residue of an amino acid that comprises a terminal olefin and a nitrogen atom other than the nitrogen atom of its amino group. In some embodiments, a provided amino acid sequence comprises at least one residue of an amino acid that has a side chain than comprises a terminal olefin and a nitrogen atom. In some embodiments, a provided amino acid sequence comprises at least one residue of an amino acid of formula A-I, wherein R^{a2} comprising an olefin and a −N(R')− moiety,

wherein R' is as described in the present disclosure (including, in some embodiments, optionally taken together with R^{a3} and their intervening atoms to form an optionally substituted ring as described in the present disclosure). In some embodiments, R^{a2} comprising a terminal olefin and a −N(R')− moiety wherein R' is as described in the present disclosure. In some embodiments, a provided amino acid sequence comprises at least one residue of an amino acid selected from Table A-I. In some embodiments, a provided amino acid sequence comprises at least one residue of an amino acid selected from Table A-II. In some embodiments, a provided amino acid sequence comprises at least one residue of an amino acid selected from Table A-III. In some embodiments, two olefins from two side chains are linked together through olefin metathesis to form a staple. In some embodiments, a staple is preferably formed by side chains of amino acid residues that are not at the corresponding positions of a target of interest. In some embodiments, a formed staple does not disrupt interaction between the peptide and a target of interest.

[0179] In some embodiments, a provided staple is a hydrocarbon staple. In some embodiments, a hydrocarbon staple comprises no chain heteroatoms wherein a chain of a staple is the shortest covalent connection within the staple from one end of the staple to the other end of the staple.

[0180] In some embodiments, an olefin in a staple is a *Z*-olefin. In some embodiments, an olefin in a staple in an *E*-olefin. In some embodiments, a provided composition comprises stapled peptides comprising a staple that contains a *Z*-olefin and stapled peptides comprising a staple that contains an *E*-olefin. In some embodiments, a provided composition comprises stapled peptides comprising a staple that contains a *Z*-olefin. In some embodiments, a provided composition comprises stapled peptides comprising a staple that contains an *E*-olefin. In some embodiments, otherwise identical stapled peptides that differ only in the *E/Z* configuration of staple olefin demonstrate different properties and/or activities as demonstrated herein. In some embodiments, stapled peptides with *E*-olefin in a staple may provide certain desirable properties and/or activities given the context. In some embodiments, stapled peptides with *Z*-olefin in a staple may provide certain desirable properties and/or activities given the context.

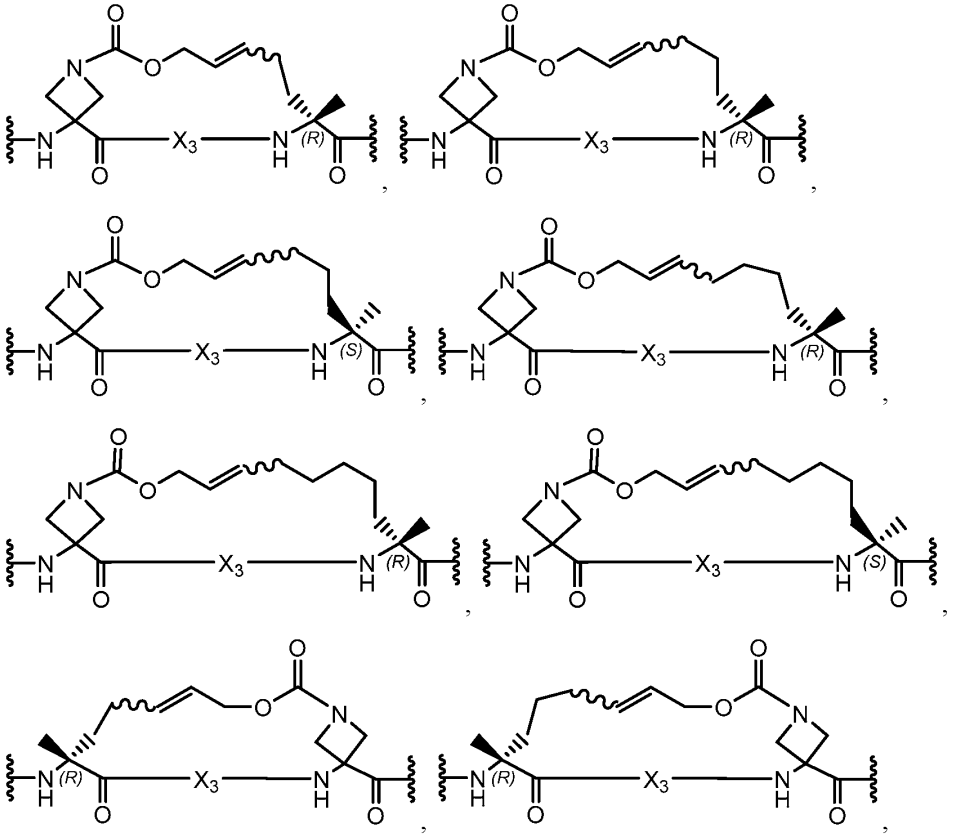
[0181] In some embodiments, the present disclosure provides compositions comprising stapled peptides. In some embodiments, a composition comprises one and only one stereoisomer of a stapled peptide (e.g., *E* or *Z* isomer, and/or a single diastereomer/enantiomer with respect to a chiral center, etc.). In some embodiments, a composition comprises two or more stereoisomers (*e.g.*, both *E* and *Z* isomers of one or more double bonds, and/or one or more diastereomers/enantiomers with respect to a chiral center, etc.). In some embodiments, a composition corresponds to a single peak in a chromatographic separation, e.g., HPLC. In some embodiments, a peak comprises one and only one stereoisomers. In some embodiments, a peak comprises two or more stereoisomers.

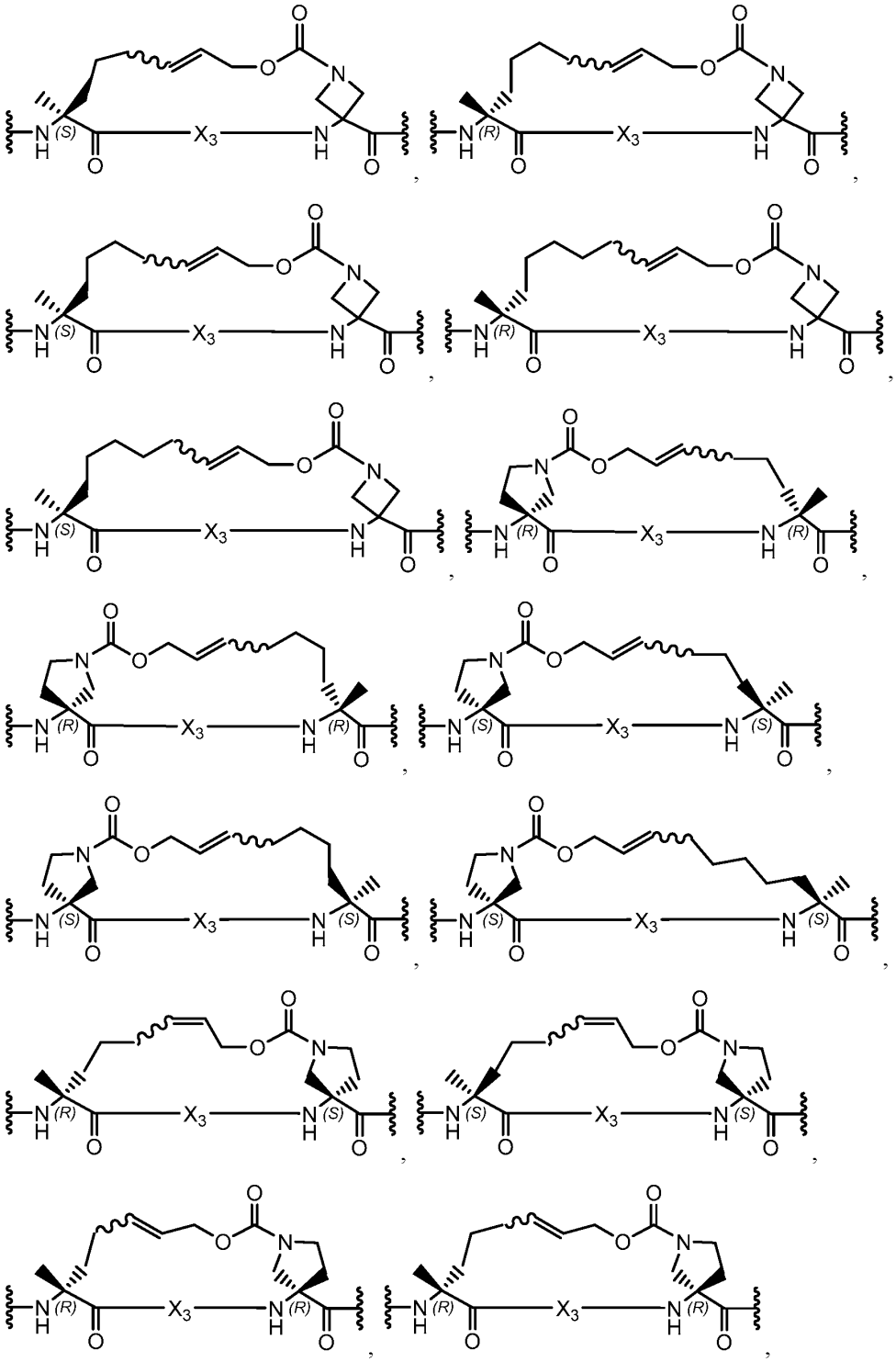
[0182] In some embodiments, two staples may be bonded to the same atom of the peptide backbone, forming a stitched peptide.

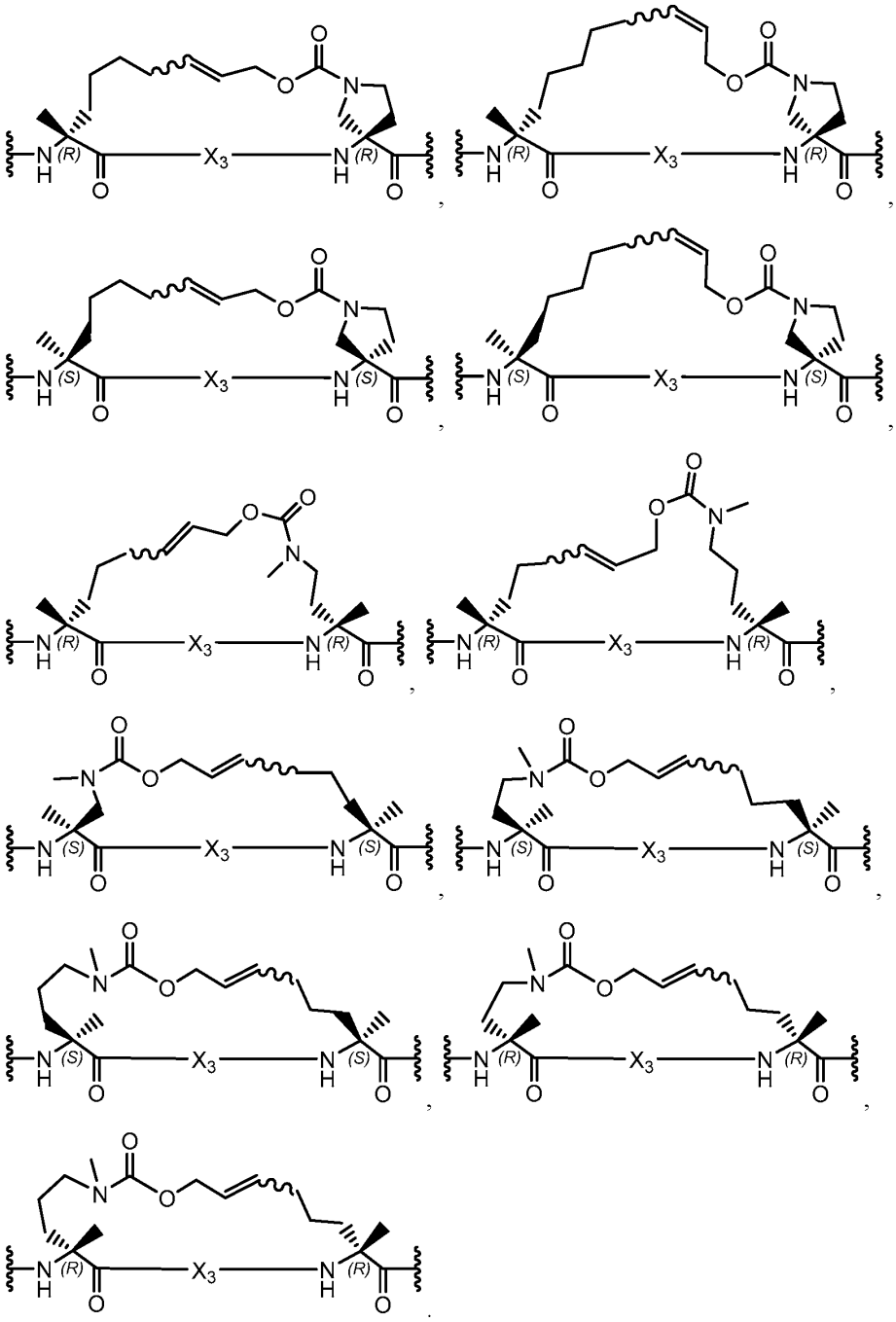
[0183] In some embodiments, a staple is pro-lock wherein one end of the staple is bonded to the alpha-carbon of a proline residue.

[0184] In some embodiments, a staple is a staple illustrated below in Tables S-1, S-2, S-3, S-4 and S-5 (with exemplary peptide backbone illustrated for clarity (can be applied to other peptide backbone), each X independently being an amino acid residue). In some embodiments, a staple is a staple in Table S-6 (with amino acid residues bonded to staples illustrated). In some embodiments, the olefin is *Z*. In some embodiments, the olefin is *E*. In some embodiments, an (i, i+3) staple is selected from Table S-1. In some embodiments, an (i, i+3) staple is selected from Table S-2. Those skilled in the art reading the present disclosure will appreciate that when staples in Table S-1 and Table S-2 are utilized for (i, i+3), "X_3" in those tables would be "X_2" (i.e., two amino acid residues instead of three amino acid residues). In some embodiments, an (i, i+4) staple is selected from Table S-1. In some embodiments, an (i, i+4) staple is selected from Table S-2. In some embodiments, an (i, i+7) staple is selected from Table S-3. In some embodiments, an (i, i+7) staple is selected from Table S-4.

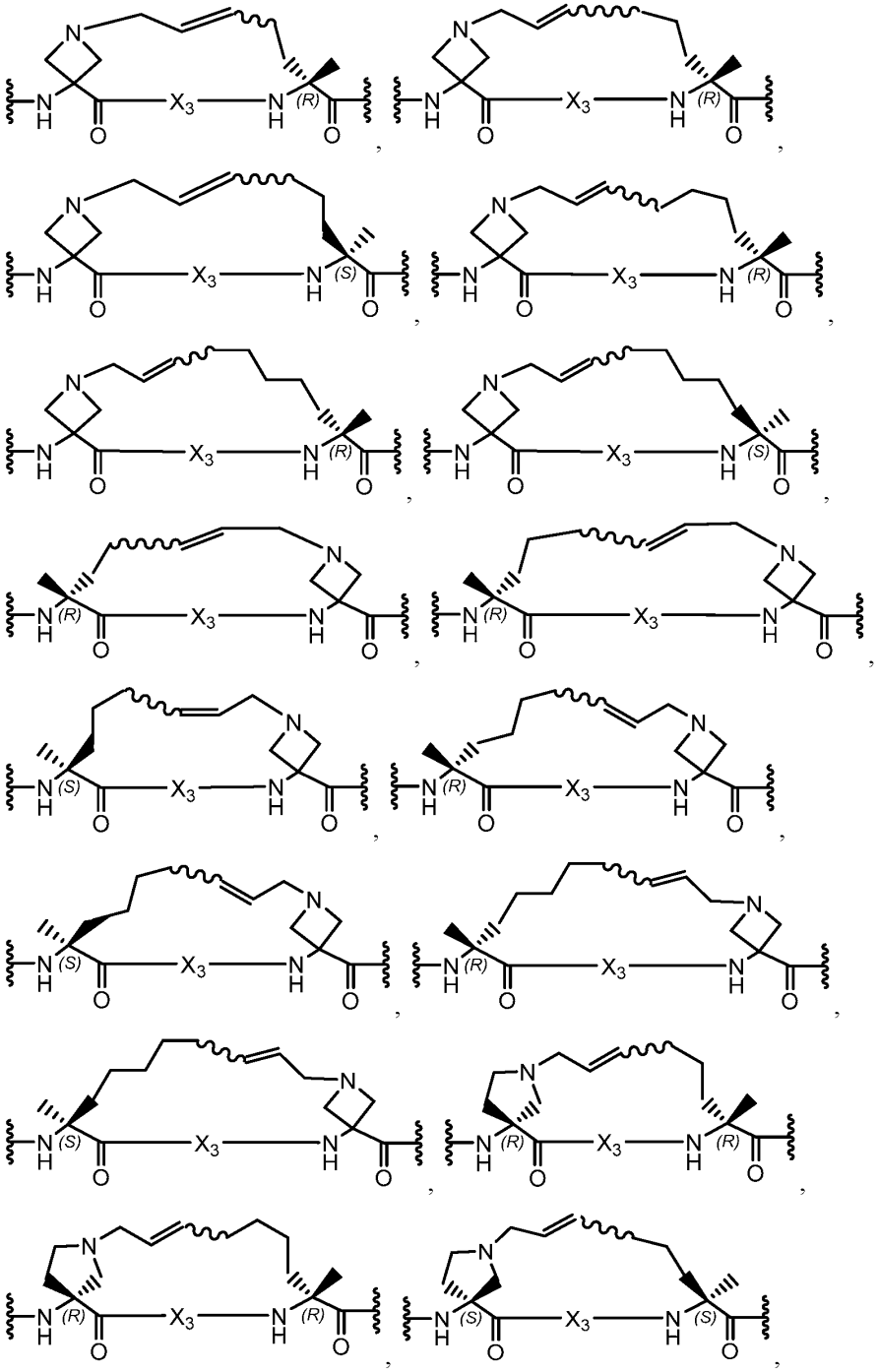
[0185] Table S-1. Exemplary staples.

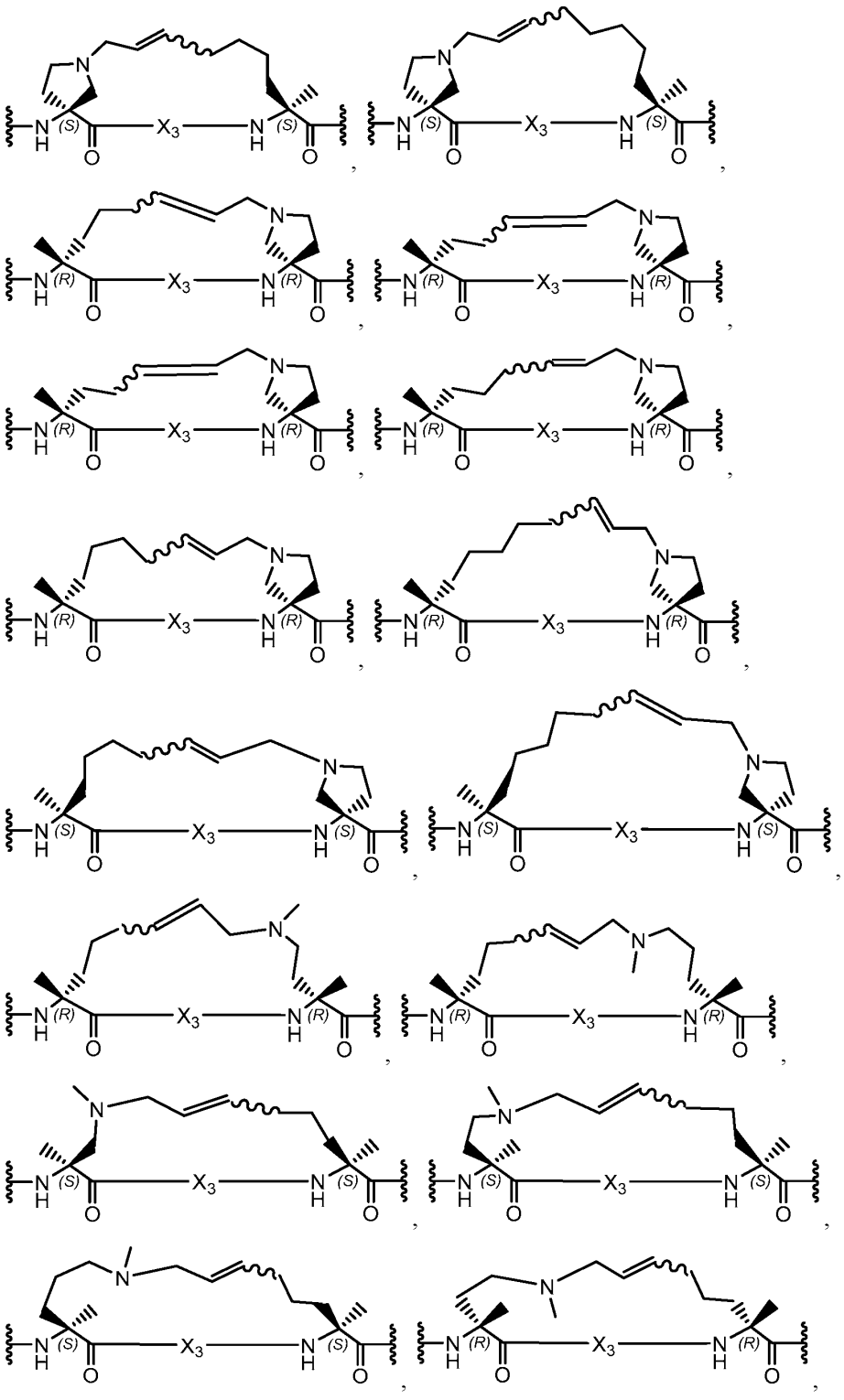


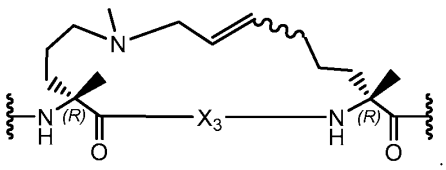




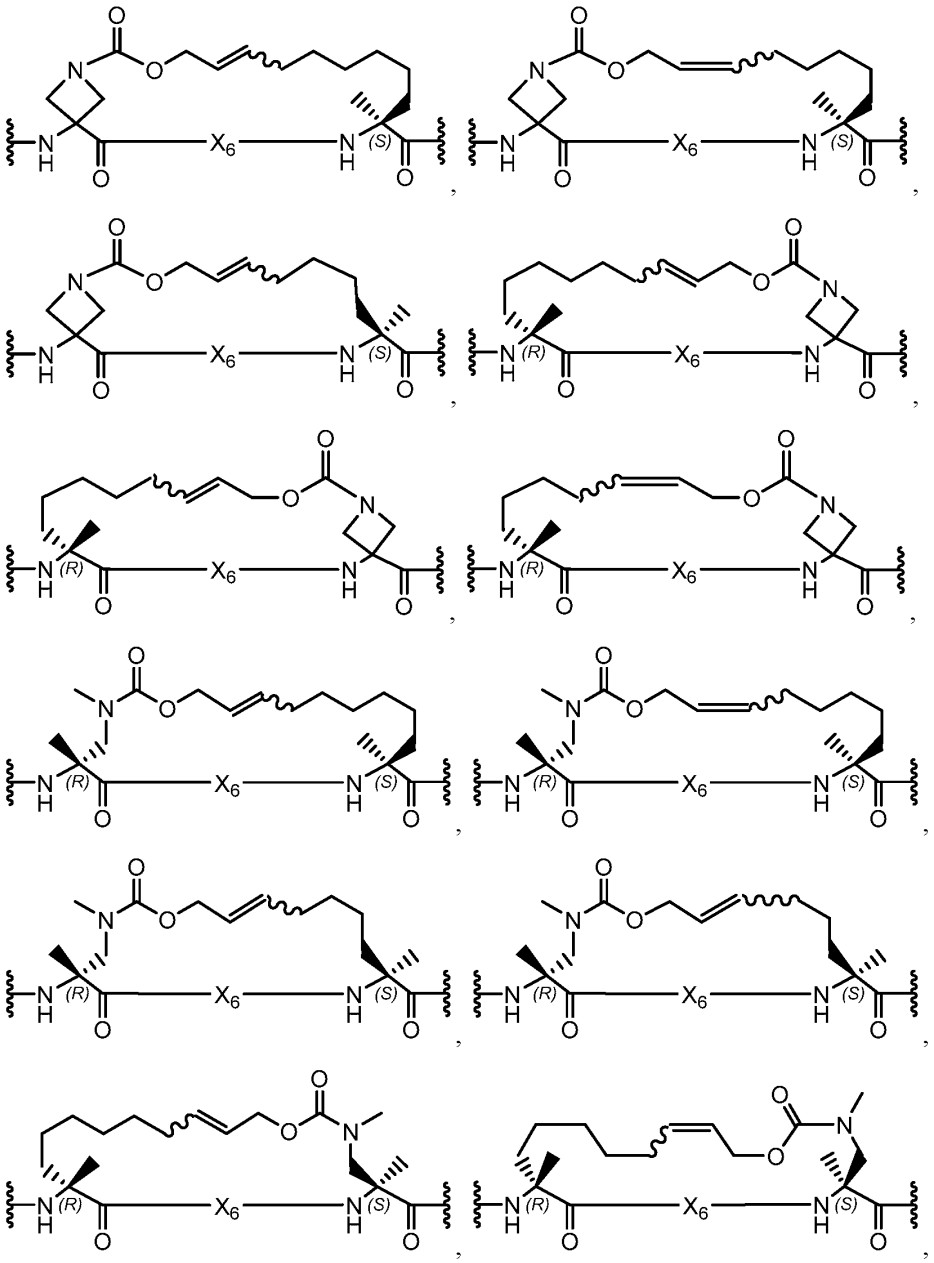
[0186] Table S-2. Exemplary staples.

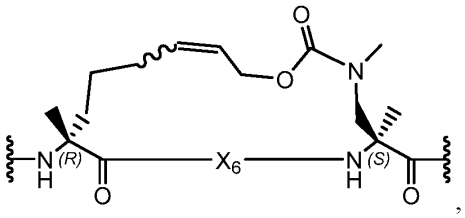
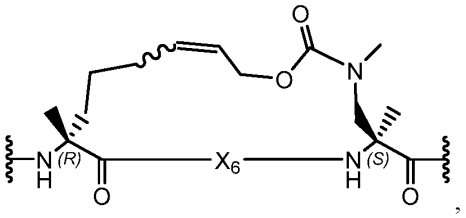
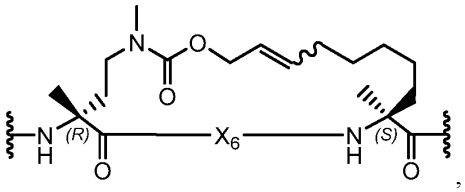
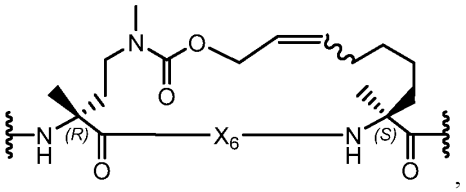
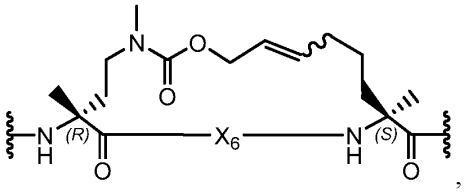
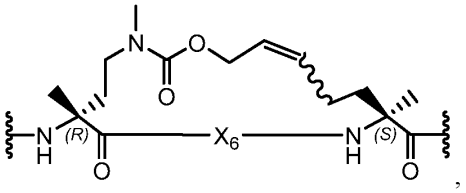
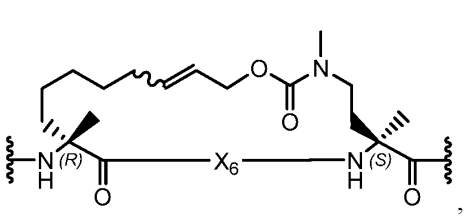
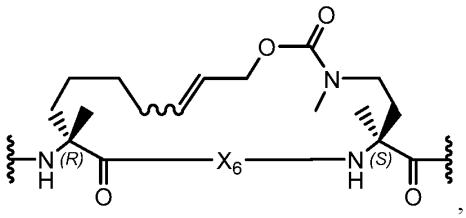
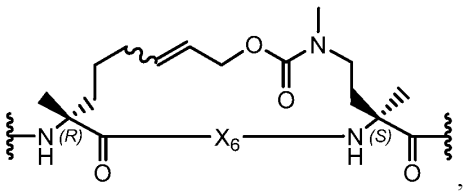
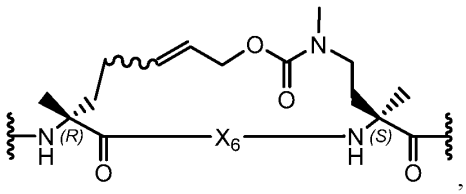
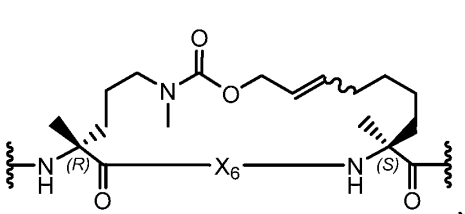
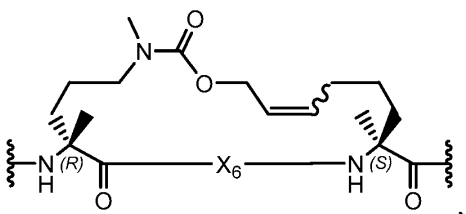
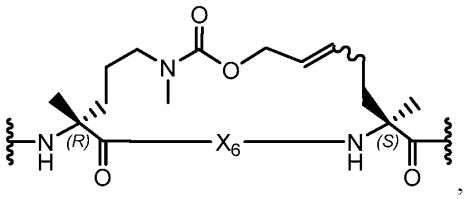
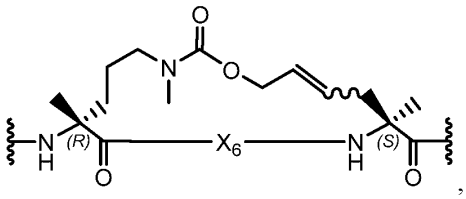


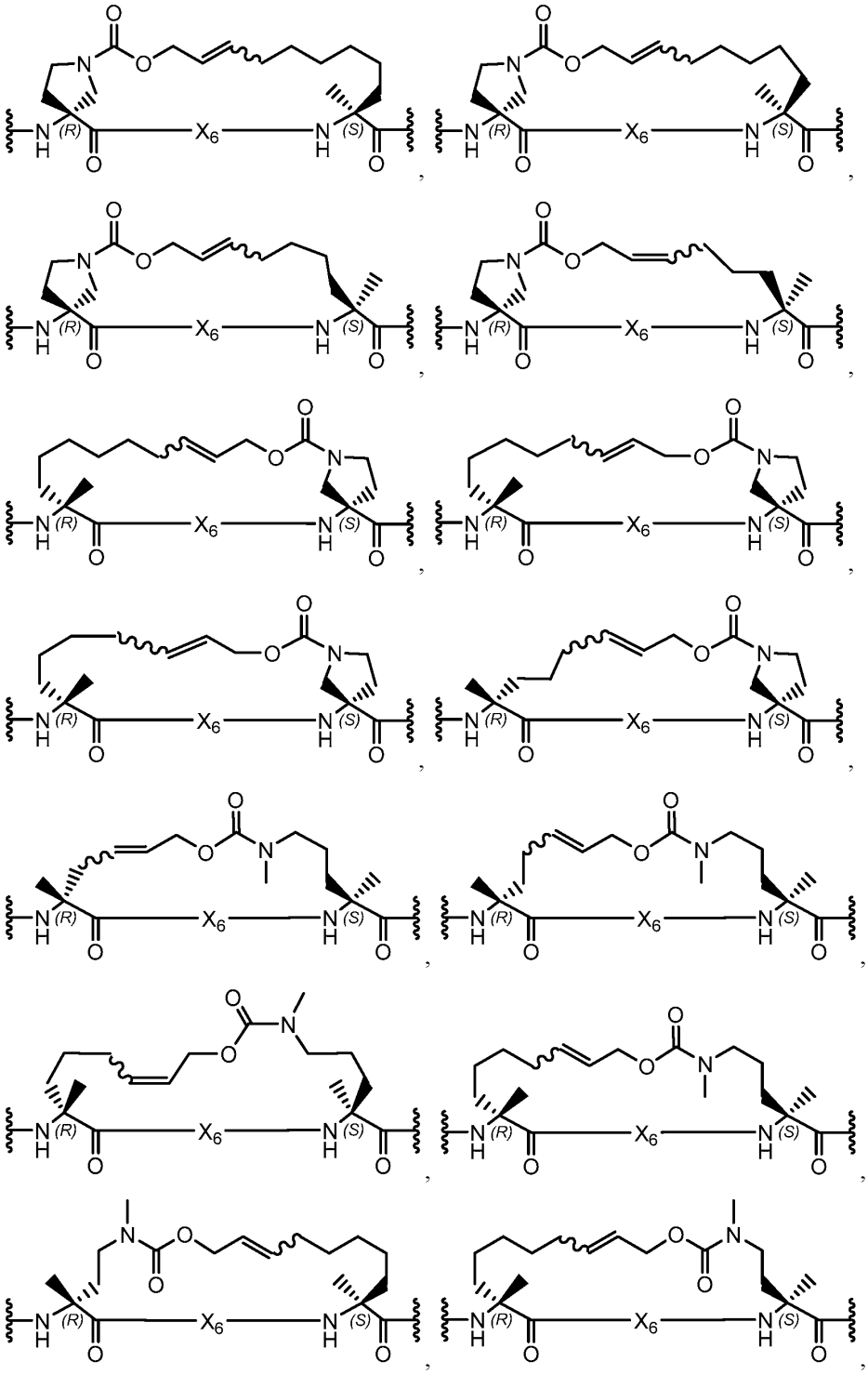


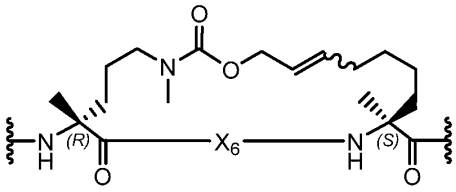
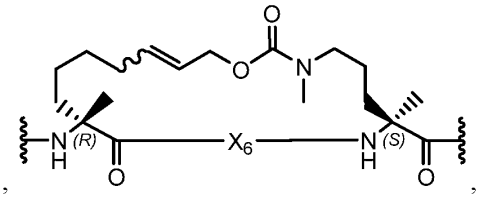
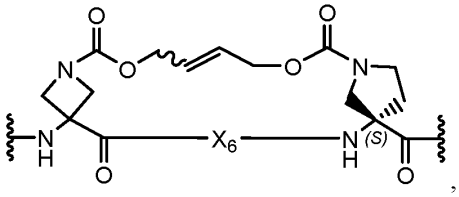
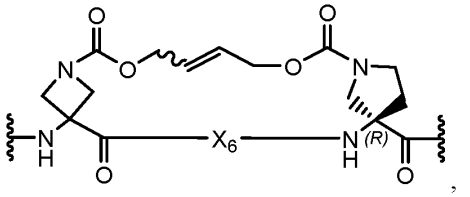
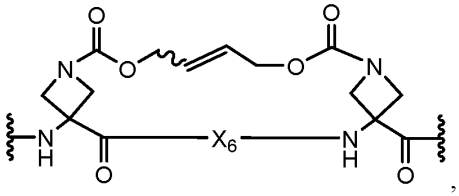
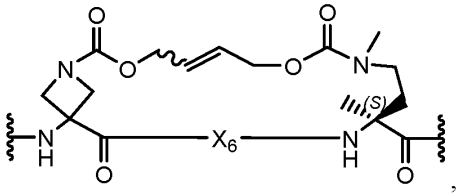
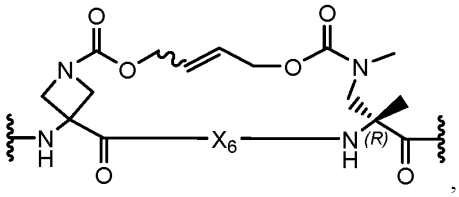
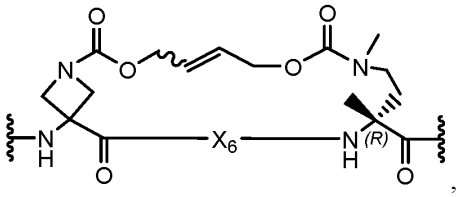
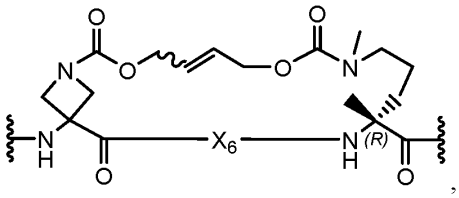
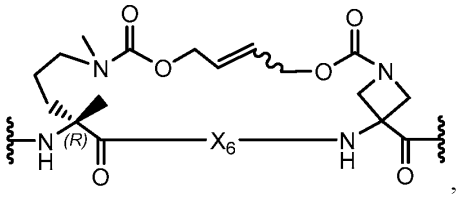
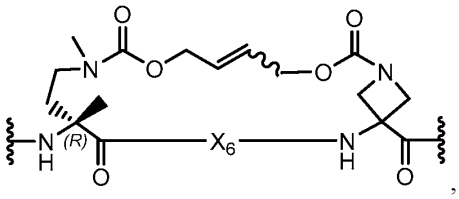
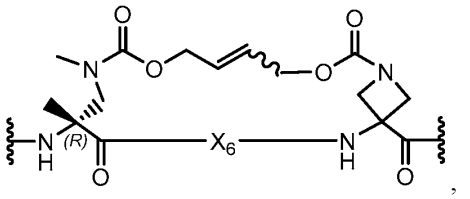
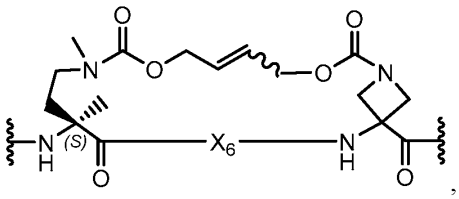
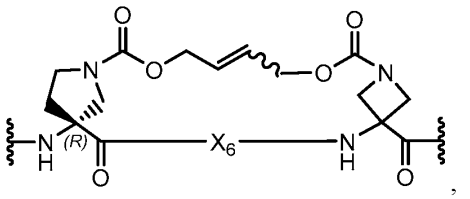


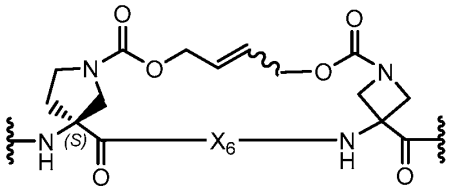
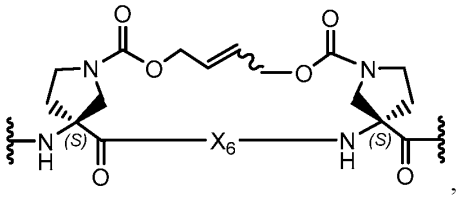
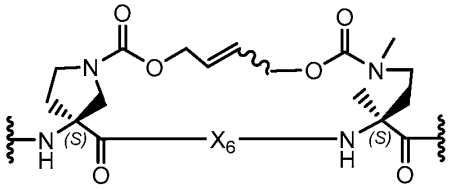
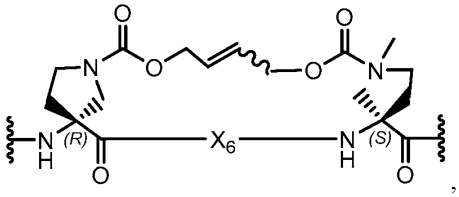
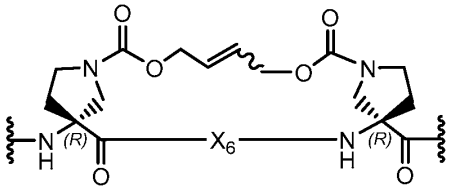
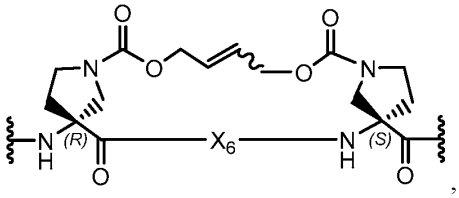
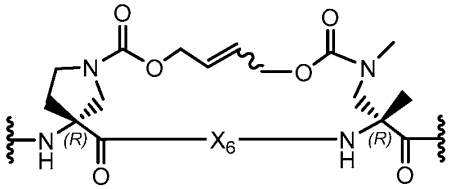
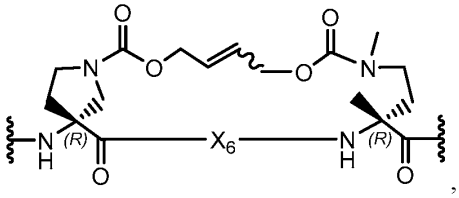
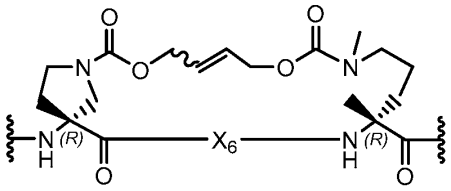
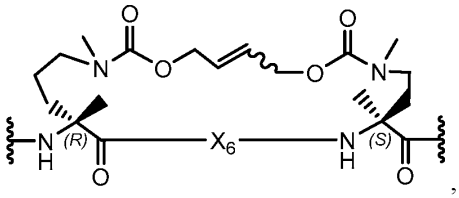
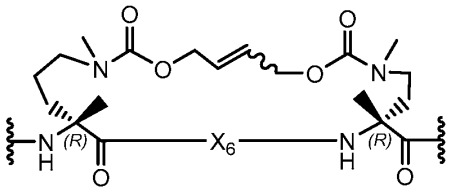
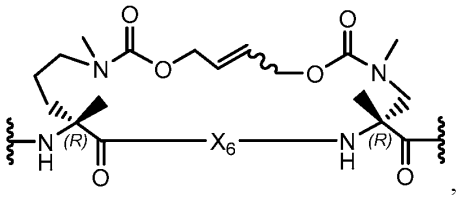
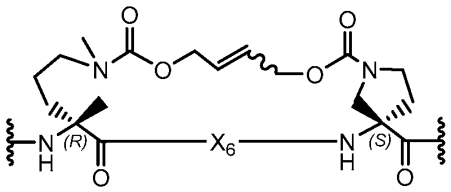
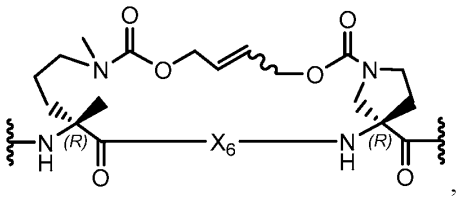
[0187] Table S-3. Exemplary staples.

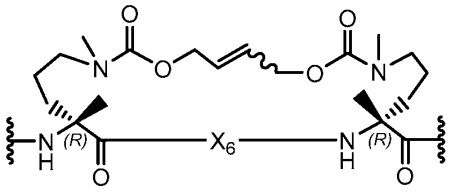
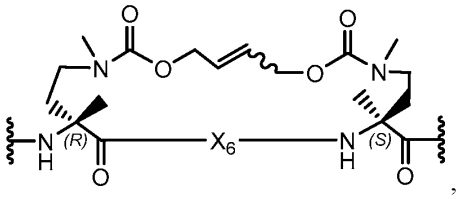
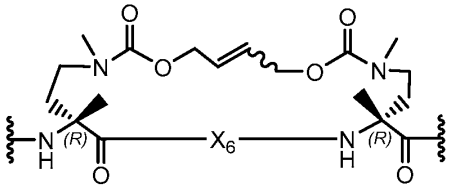
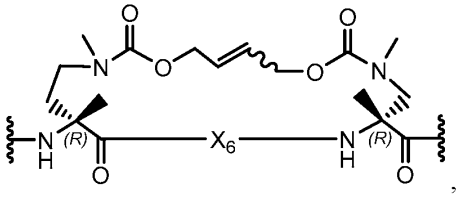
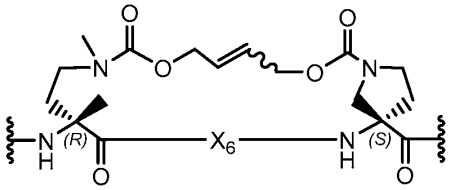
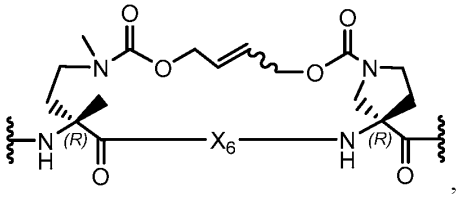
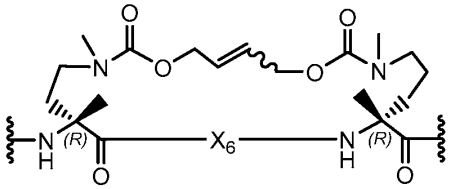
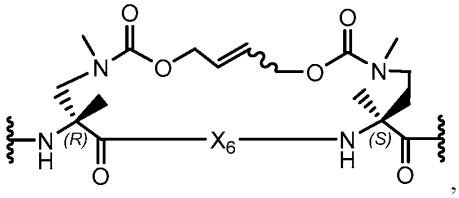
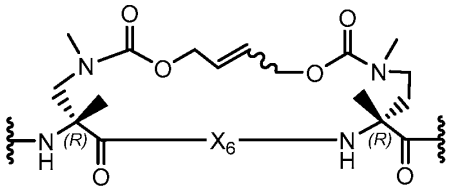
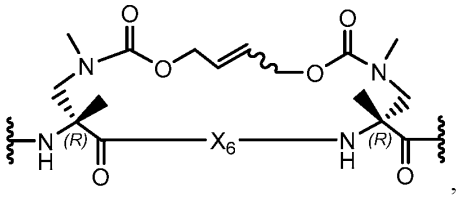
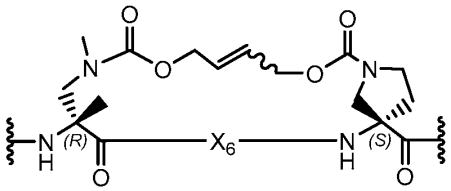
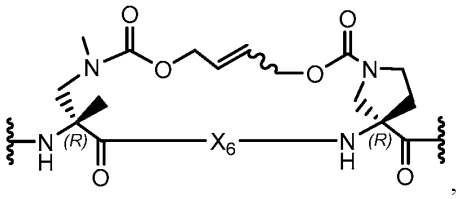
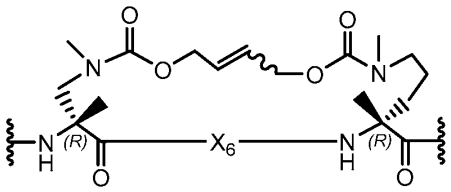
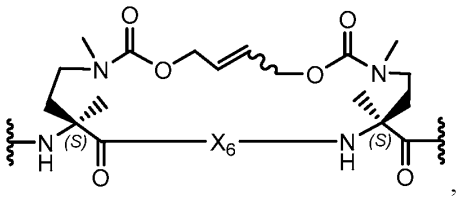


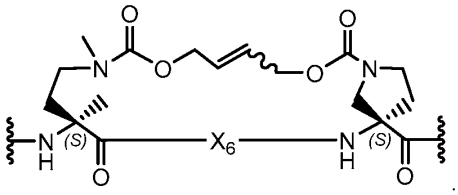

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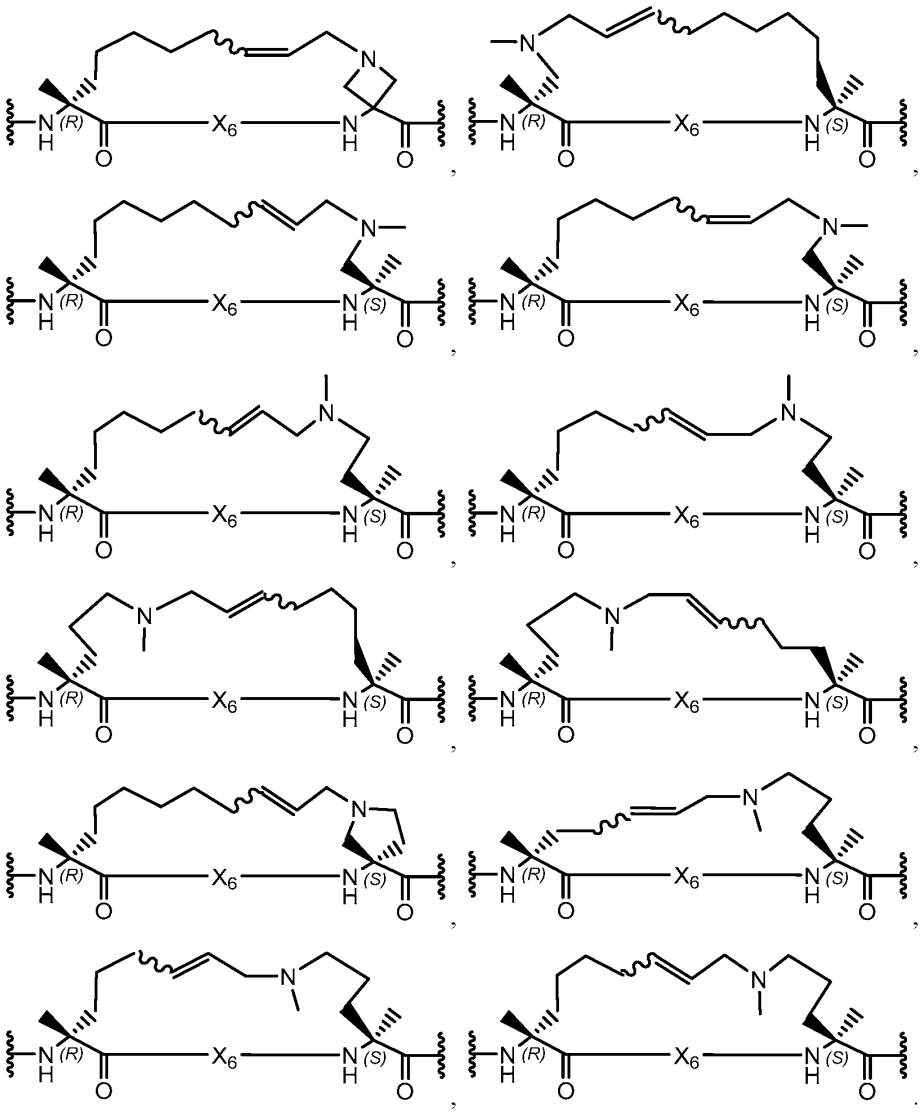

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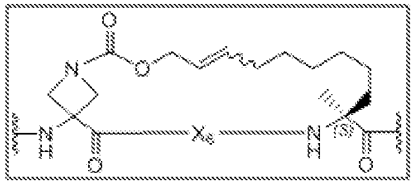
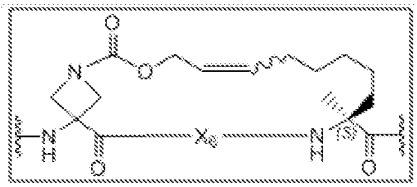
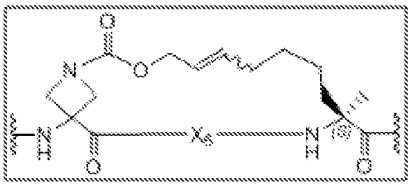
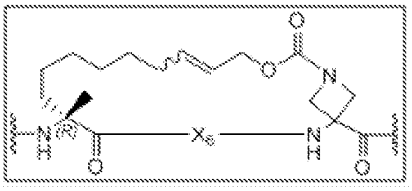
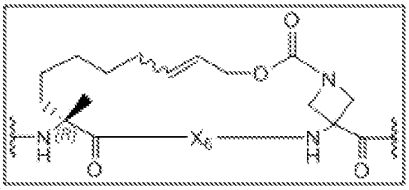
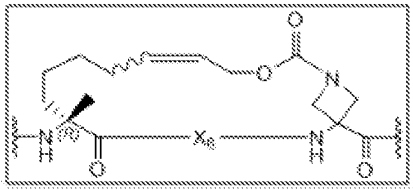
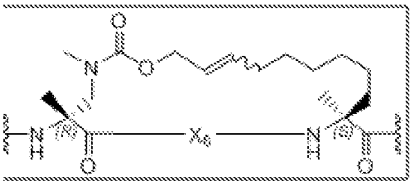


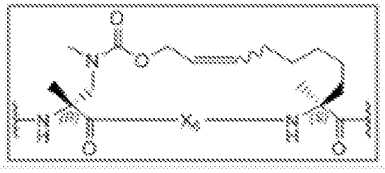
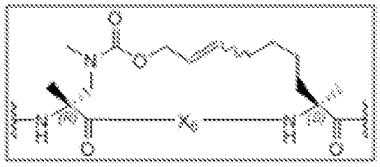
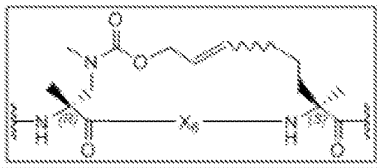
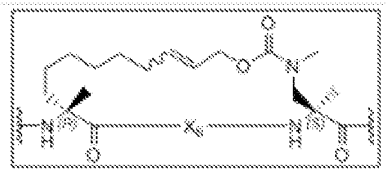
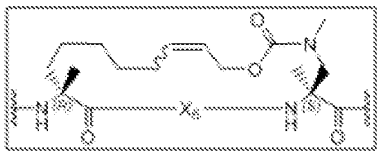
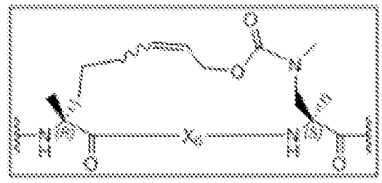
[0188] Table S-4. Exemplary staples.

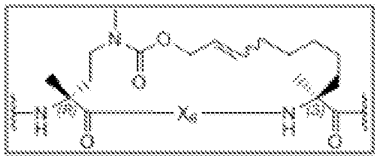
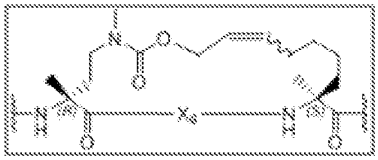
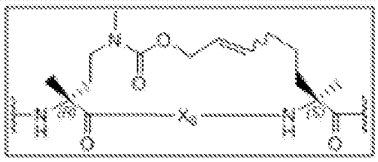
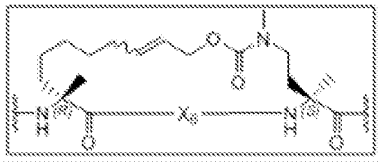
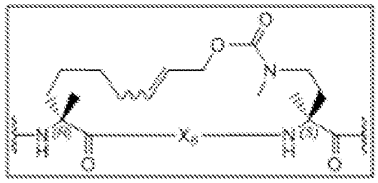
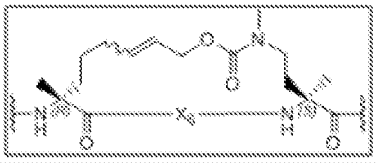


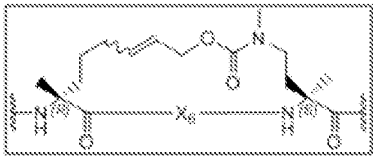
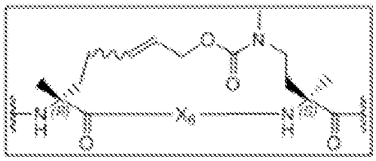
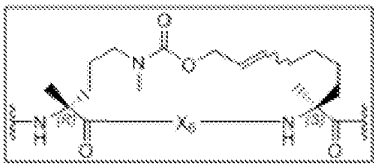
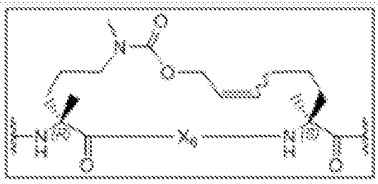
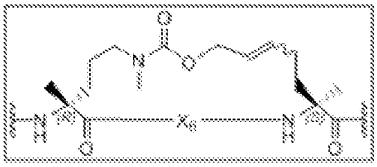
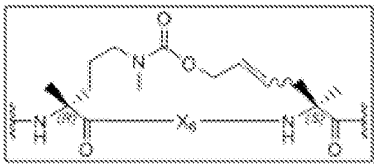
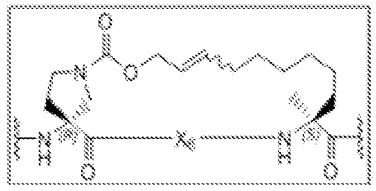
[0189] In some embodiments, a staple may be one of the following, connecting the amino acids at the indicated position:

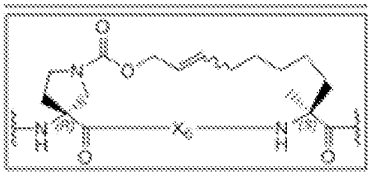
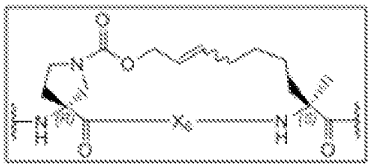
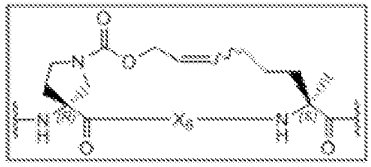
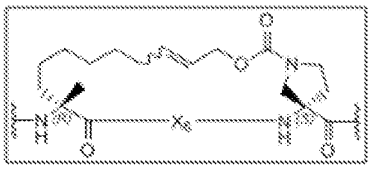
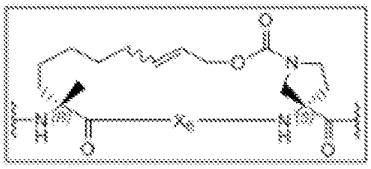
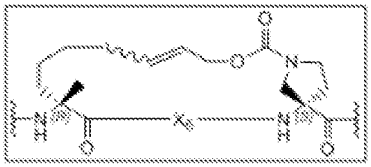
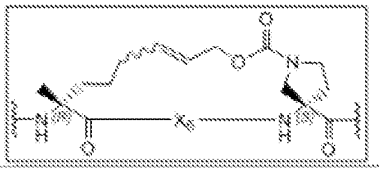
Table S-5. Certain amino acids and staples.

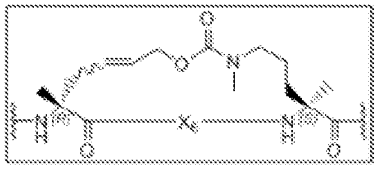
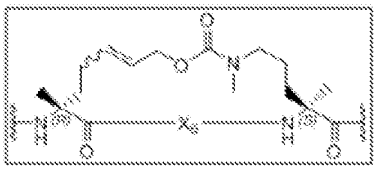
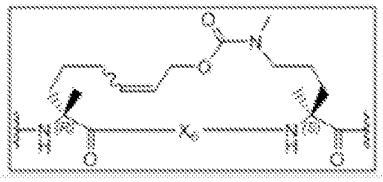
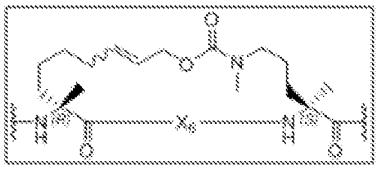
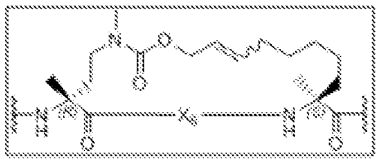
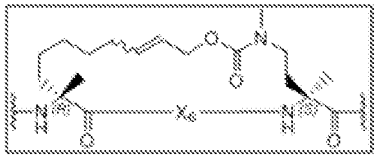
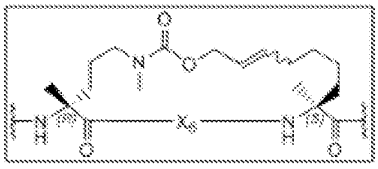
Amino Acid 1	Amino Acid 2 (i+7	staple
Monomer A	S_8	
Monomer A	S_7	
Monomer A	S_6	
R_8	Monomer A	
R_7	Monomer A	
R_6	Monomer A	
Monomer E	S_8	

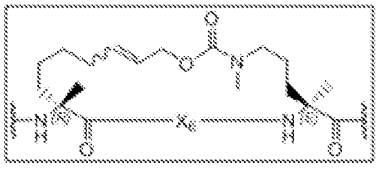
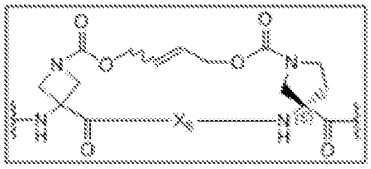
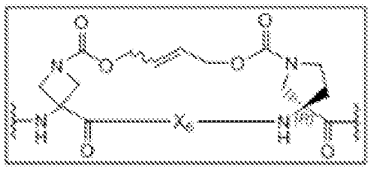
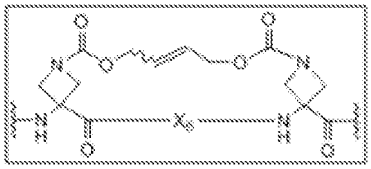
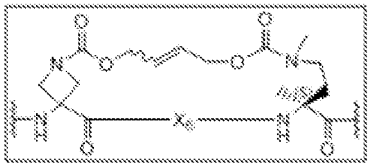
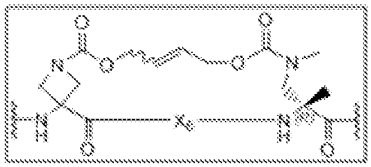
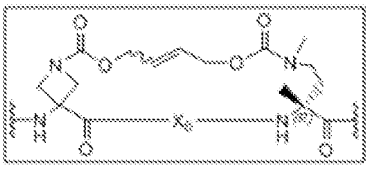
Amino Acid 1	Amino Acid 2 (i +7	Staple
Monomer E	S_7	
Monomer E	S_8	
Monomer E	S_5	
R_8	Monomer D	
R_7	Monomer D	
R_6	Monomer D	
R_5	Monomer D	

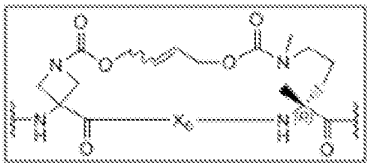
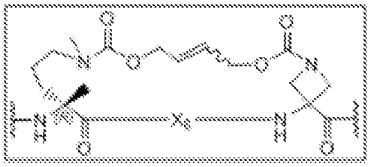
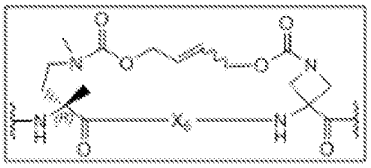
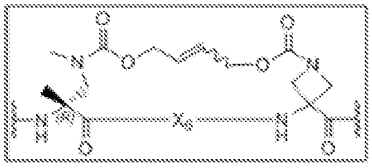
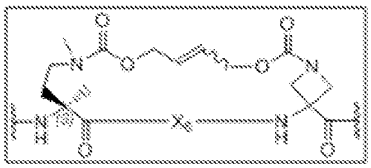
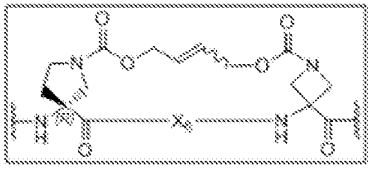
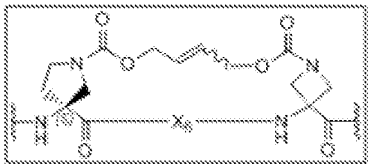
Amino Acid 1	Amino Acid 2 (i+7	Staple
Monomer G	S_7	
Monomer G	S_8	
Monomer G	S_5	
Monomer G	S_4	
R_7	Monomer F	
R_8	Monomer F	
R_5	Monomer F	

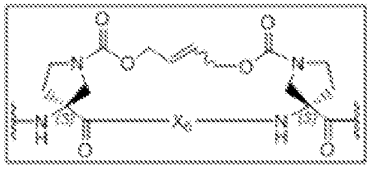
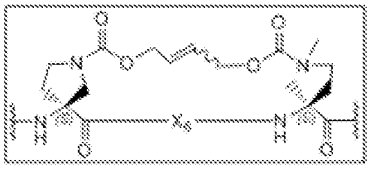
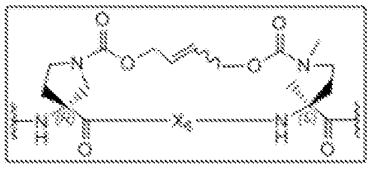
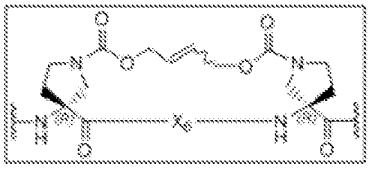
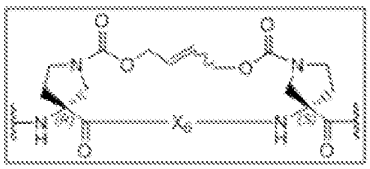
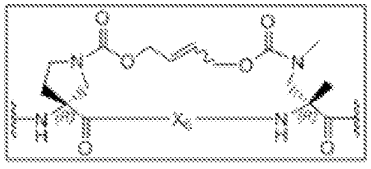
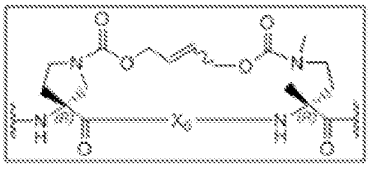
Amino Acid 1	Amino Acid 2 (*i* +7	Staple
R_5	Monomer F	
R_8	Monomer F	
Monomer I	S_5	
Monomer I	S_5	
Monomer I	S_8	
Monomer I	S_8	
Monomer C	S_5	

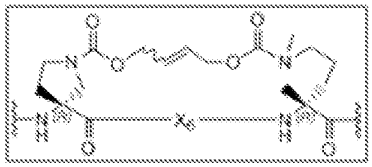
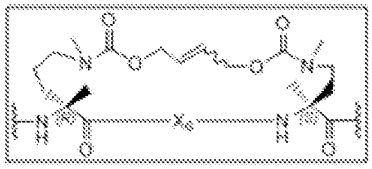
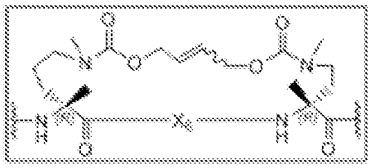
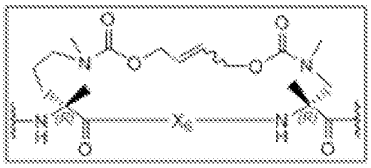
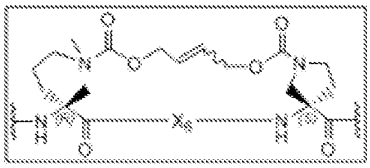
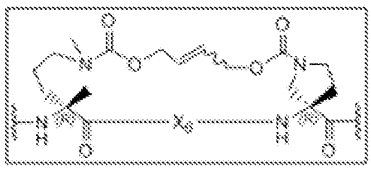
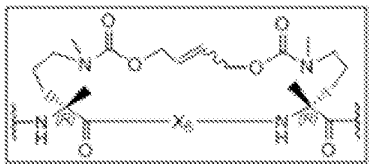
Amino Acid 1	Amino Acid 2 (i+7	staple
Monomer C	S_7	
Monomer C	S_8	
Monomer C	S_5	
R_8	Monomer B	
R_7	Monomer B	
R_6	Monomer B	
R_5	Monomer B	

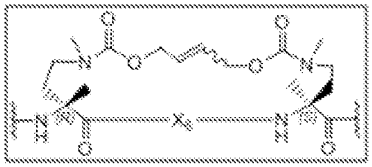
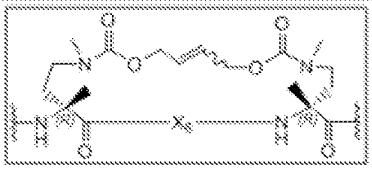
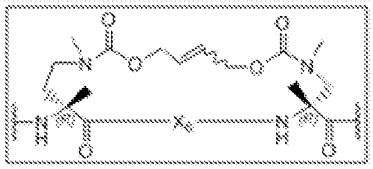
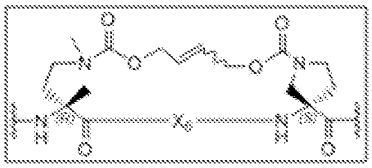
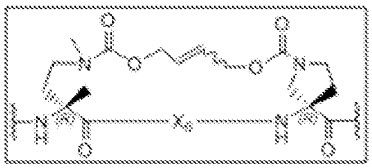
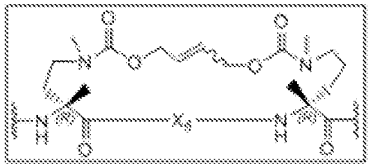
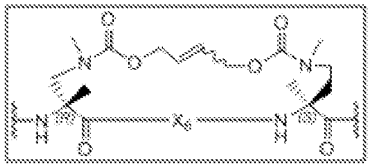
Amino Acid 1	Amino Acid 2 (i +7	Staple
R_3	Monomer H	
R_4	Monomer H	
R_5	Monomer H	
R_6	Monomer H	
Monomer G	S_7	
R_7	Monomer F	
Monomer I	S_8	

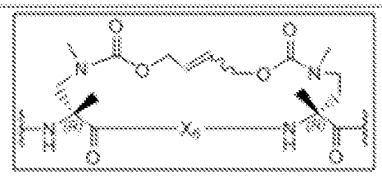
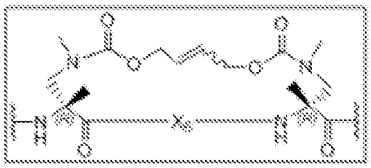
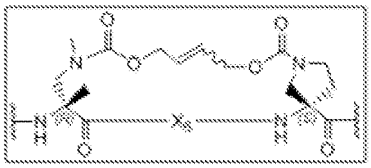
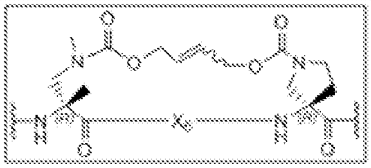
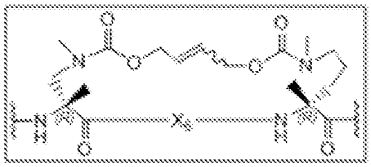
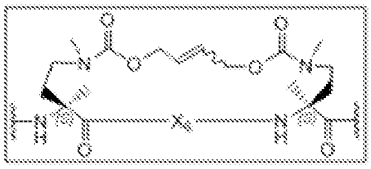
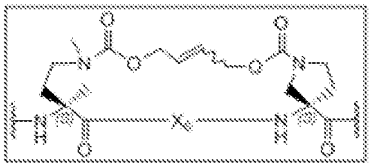
Amino Acid 1	Amino Acid 2 (*i* +7	staple
R_8	Monomer H	
Monomer A	Monomer B	
Monomer A	Monomer C	
Monomer A	Monomer A	
Monomer A	Monomer F	
Monomer A	Monomer E	
Monomer A	Monomer G	

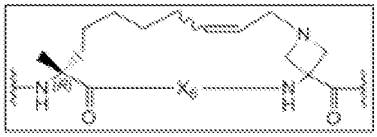
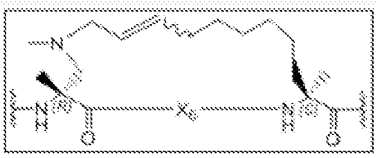
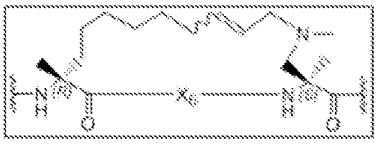
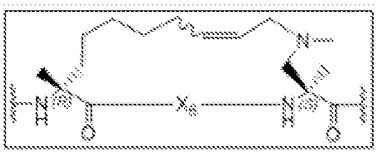
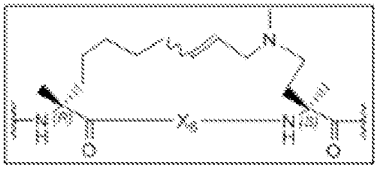
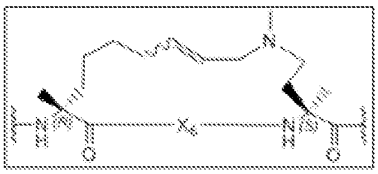
Amino Acid 1	Amino Acid 2 (i+7	Staple
Monomer A	Monomer I	
Monomer I	Monomer A	
Monomer G	Monomer A	
Monomer E	Monomer A	
Monomer F	Monomer A	
Monomer C	Monomer A	
Monomer B	Monomer A	

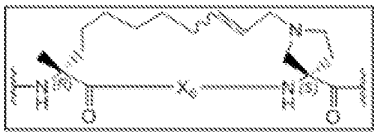
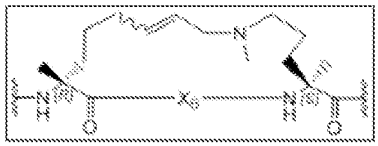
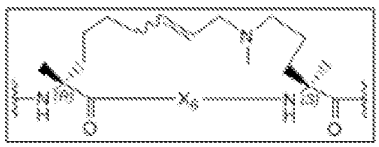
Amino Acid 1	Amino Acid 2 (i+7	Staple
Monomer B	Monomer B	
Monomer B	Monomer F	
Monomer C	Monomer F	
Monomer C	Monomer C	
Monomer C	Monomer B	
Monomer C	Monomer E	
Monomer C	Monomer G	

Amino Acid 1	Amino Acid 2 (*i*+7	staple
Monomer C	Monomer I	
Monomer I	Monomer F	
Monomer I	Monomer G	
Monomer I	Monomer E	
Monomer I	Monomer B	
Monomer I	Monomer C	
Monomer I	Monomer I	

Amino Acid 1	Amino Acid 2 (*i*+7	staple
Monomer G	Monomer F	
Monomer G	Monomer G	
Monomer G	Monomer E	
Monomer G	Monomer B	
Monomer G	Monomer C	
Monomer G	Monomer I	
Monomer E	Monomer F	

Amino Acid 1	Amino Acid 2 (*i* +7	staple
Monomer E	Monomer G	
Monomer E	Monomer E	
Monomer E	Monomer B	
Monomer E	Monomer C	
Monomer E	Monomer I	
Monomer F	Monomer F	
Monomer F	Monomer B	

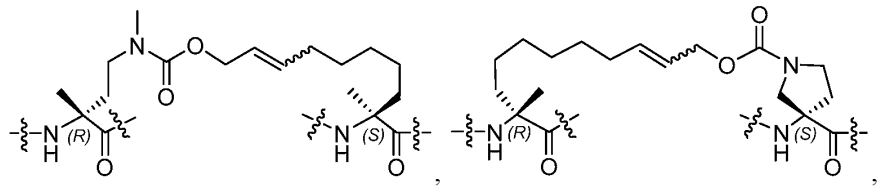
Amino Acid 1 (*i* position)	Amino Acid 2 (*i*+7 position)	staple
R_5	Monomer A	
Monomer E	S_8	
R_8	Monomer D	
R_7	Monomer D	
R_7	Monomer F	
R_8	Monomer F	

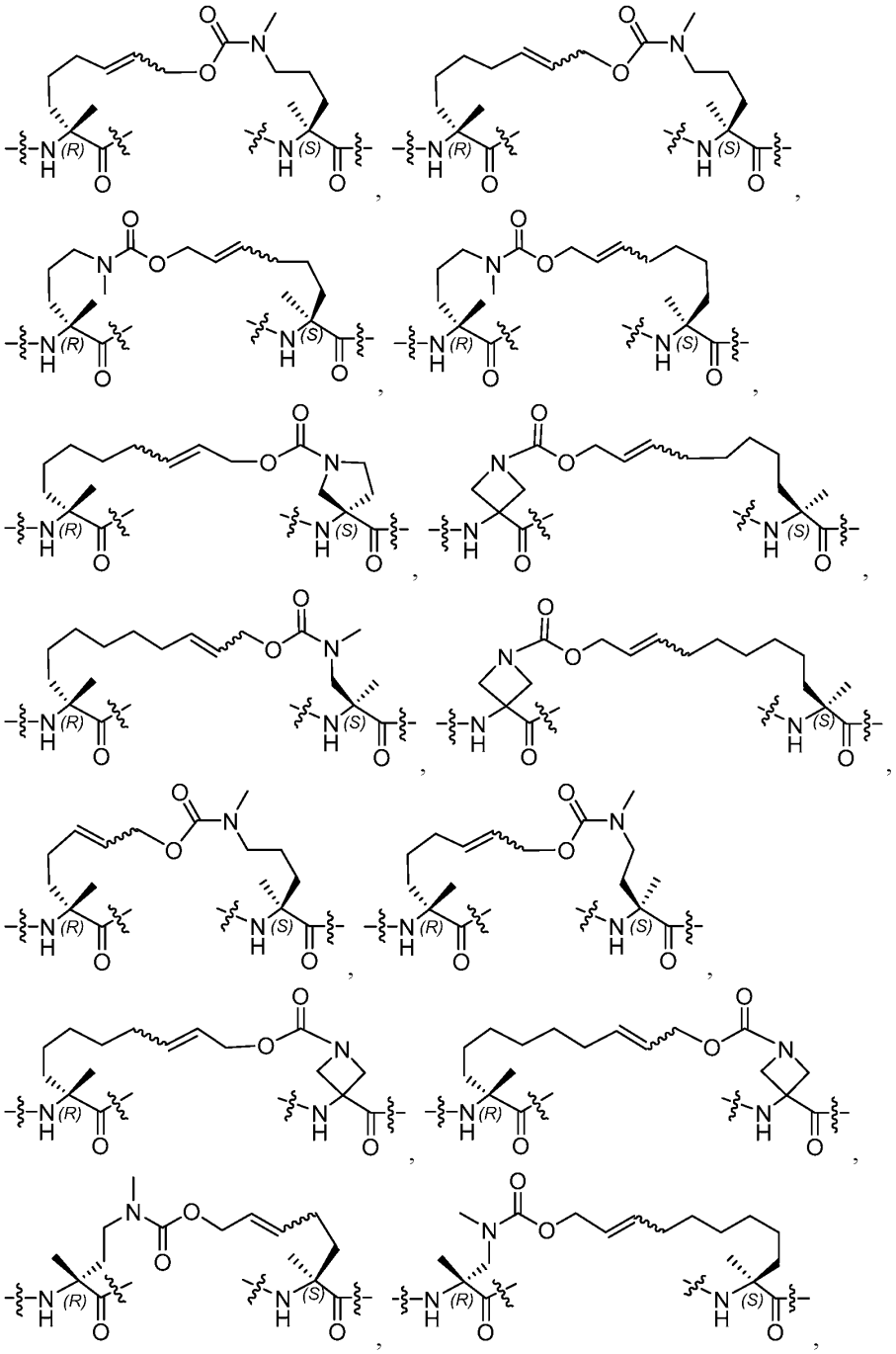
Amino Acid 1 (*i* position)	Amino Acid 2 (*i*+7 position)	staple
Monomer I	S_5	
Monomer I	S_5	
R_5	Monomer B	
R_5	Monomer H	
R_5	Monomer H	
R_5	Monomer H	

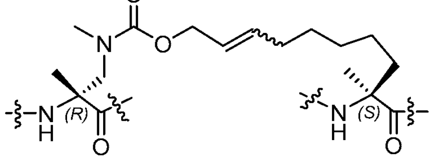
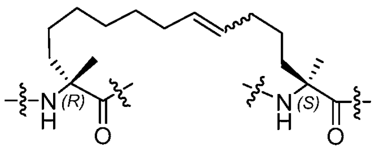
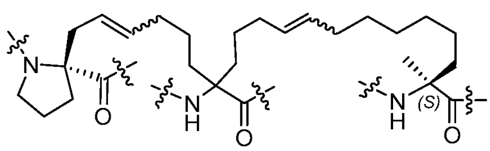
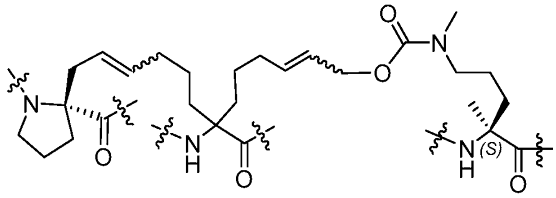
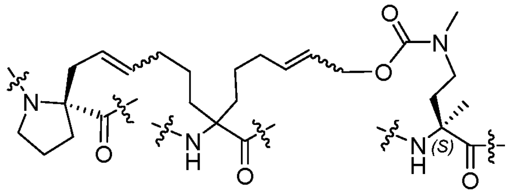
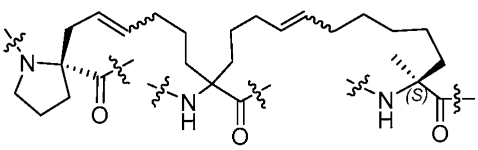
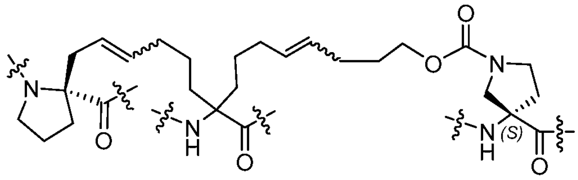
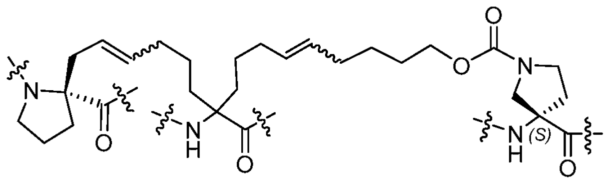
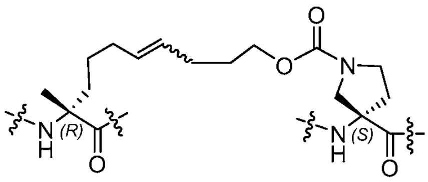
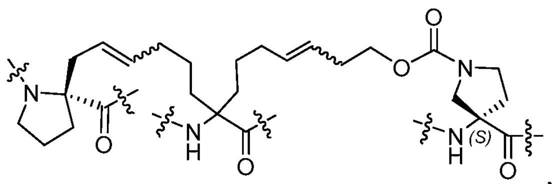
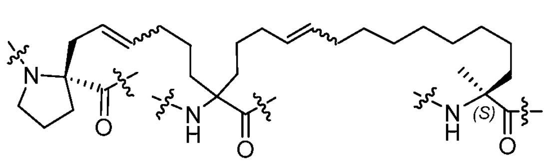
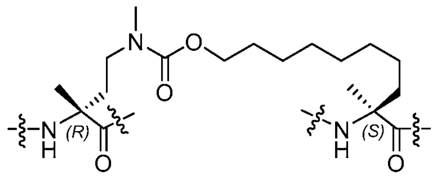
[0190] In some embodiments, a peptide comprises a staple or stitch (two staples) from Table S-6. In Table 6, the amino acid residues can either be from N to C or C to N. In some embodiments, it is N to C. In some embodiments, it is C to N. In some embodiments, a double bond is *E*. In some embodiments, a double bond is *Z*. In some embodiments, a staple is a (i, i+3) staple. In some embodiments, a staple is a (i, i+4) staple. In some embodiments, a staple is a (i, i+7) staple. In some embodiments, each double is independently *E* or *Z* when a structure comprises more than one double bond. In some embodiments, each staple is independently a (i, i+3) or a (i, i+4) staple or a (i, i+7) staple. In some embodiments, each

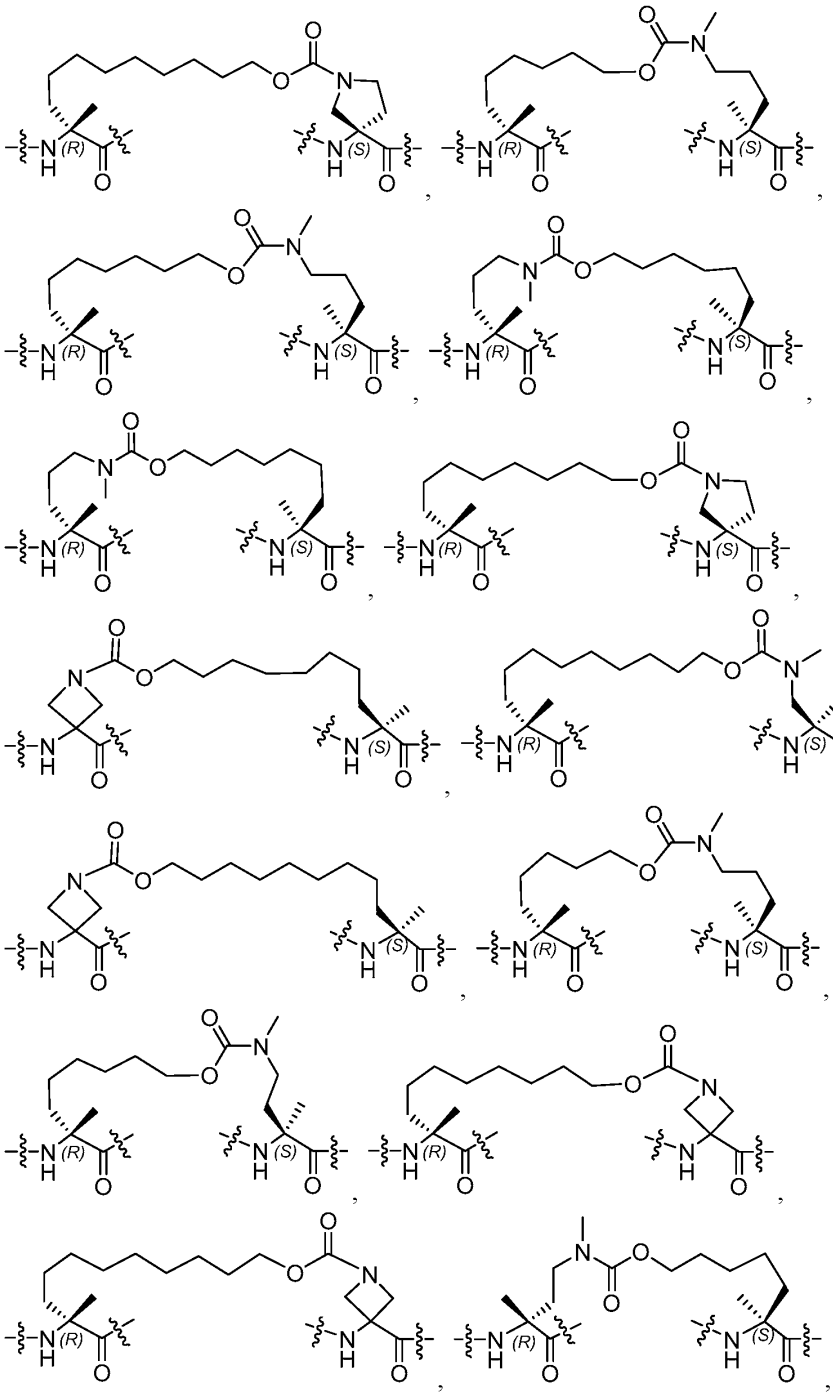
staple is independently a (i, i+4) staple or a (i, i+7) staple in a structure comprising two staples. In some embodiments, one staple is a (i, i+4) staple and the other is a (i, i+7) staple. In some embodiments, a PL3 residue is bonded to a (i, i+3) staple. In some embodiments, a PL3 residue is bonded to a (i, i+4) staple. In some embodiments, staples (e.g., those in Table 6) are formed by metathesis of double bonds in side chains of amino acid residues, e.g., RdN and S7, R8 and PyrS, R5 and SeN, R6 and SeN, ReN and S5, ReN and S6, R7 and PyrS, Az and S7, R8 and SgN, Az and S8, R4 and SeN, R5 and SdN, R7 and Az, R8 and Az, RdN and S4, RgN and S8, RgN and S7, R8 and S5, PL3 and B5 and the same B5 and S8, PL3 and B5 and the same B5 and SeN, PL3 and B5 and the same B5 and SdN, PL3 and B5 and the same B5 and S7, PL3 and B5 and the same B5 and PyrS2, PL3 and B5 and the same B5 and PyrS3, R5 and PyrS2, PL3 and B5 and the same B5 and PyrS1, PL3 and B5 and the same B5 and S10, PL3 and B5 and the same B5 and PyrR2, PL3 and B5 and the same B5 and PyrS, PL3 and B5 and the same B5 and Az, PL3 and B5 and the same B5 and SeNc5, HypEs5 and B5 and the same B5 and PyrS2, HypEs4 and B5 and the same B5 and PyrS2, ProSAm3 and B5 and the same B5 and PyrS2, ProAm5 and B5 and the same B5 and PyrS2, ProAm6 and B5 and the same B5 and PyrS2, BzAm3Oallyl and B5 and the same B5 and PyrS2, HypBzEs3OAllyl and B5 and the same B5 and PyrS2, ProBzAm3OAllyl and B5 and the same B5 and PyrS2, PAc3OAllyl and B5 and the same B5 and PyrS2, ProPAc3OAllyl and B5 and the same B5 and PyrS2, HypPAc3OAllyl and B5 and the same B5 and PyrS2, Bn3OAllyl and B5 and the same B5 and PyrS2, R3 and B5 and the same B5 and PyrS2, R5 and B5 and the same B5 and PyrS2, BzAm2Allyl-MePro and B5 and the same B5 and PyrS2, PL3 and B5 and the same B5 and SPip1, PL3 and B5 and the same B5 and SPip2, PL3 and B5 and the same B5 and SPip3, PL3 and B5 and the same B5 and Az2, PL3 and B5 and the same B5 and Az3, PL3 and S5, R5 and S5, PL3 and B4 and the same B4 and PyrS1, PL3 and B4 and the same B4 and PyrS2, PL3 and B4 and the same B4 and PyrS3, PL3 and S6, PL3 and S4, PL3 and S3, R6 and PyrS2, R4 and PyrS2, R3 and PyrS2, PL3 and B3 and the same B3 and PyrS2, PL3 and B3 and the same B3 and PyrS3, PL3 and B3 and the same B3 and PyrS4, PL3 and B6 and the same B6 and PyrS, PL3 and B6 and the same B6 and PyrS1, PL3 and B6 and the same B6 and PyrS2, 5hexenyl-MePro and B5 and the same B5 and PyrS2, 4pentenyl-MePro and B5 and the same B5 and PyrS2, 3butenyl-MePro and B5 and the same B5 and PyrS2.

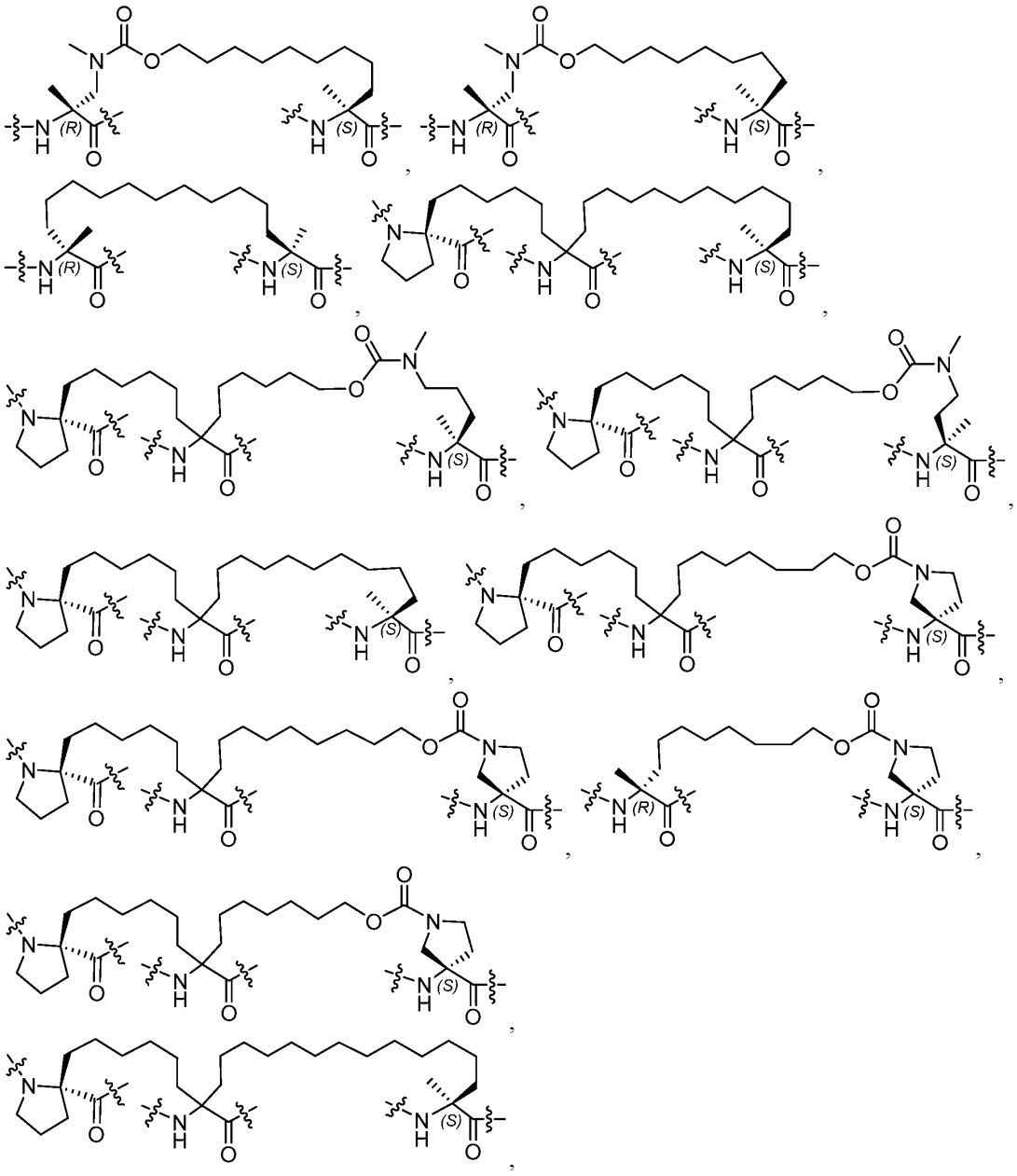
Table S-6. Certain staples (including amino acid residues bonded to staples).

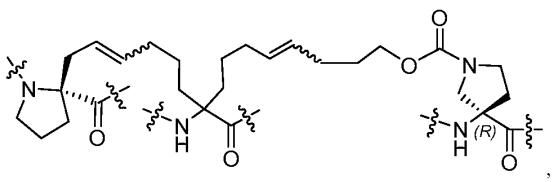


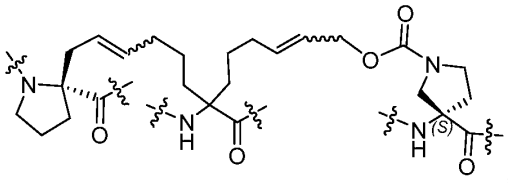


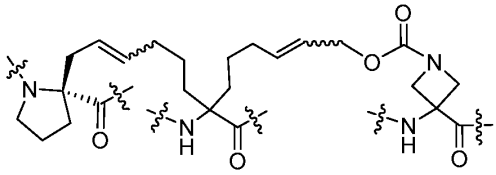

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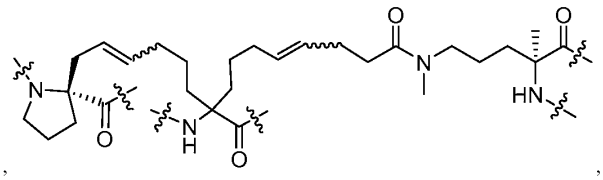


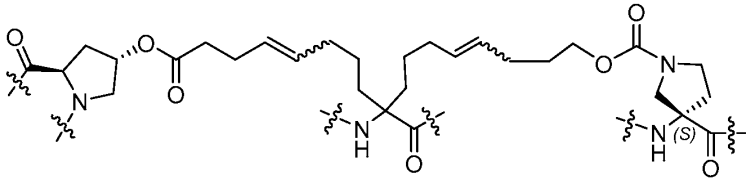


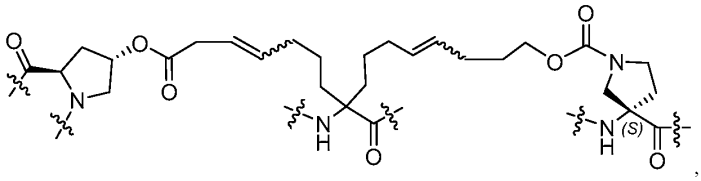


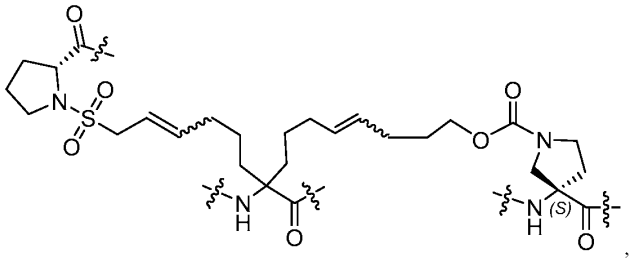


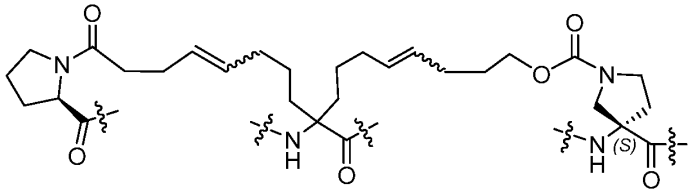


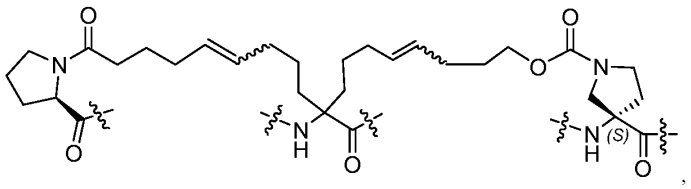


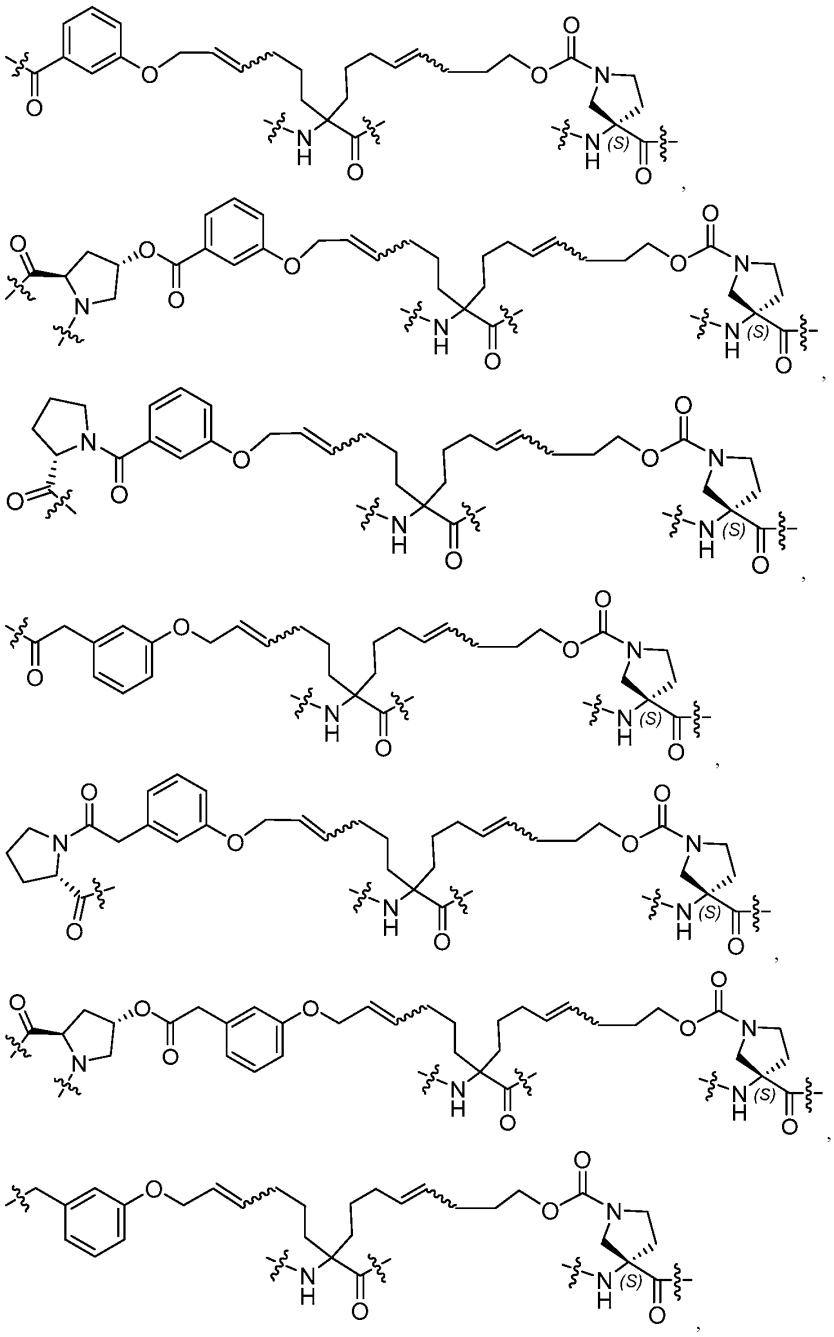


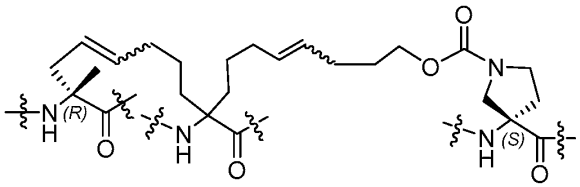


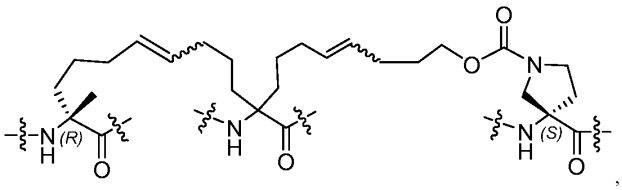


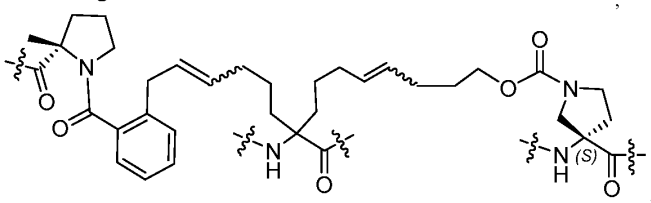


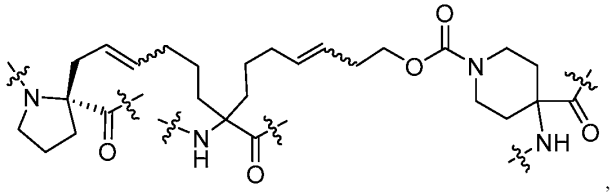


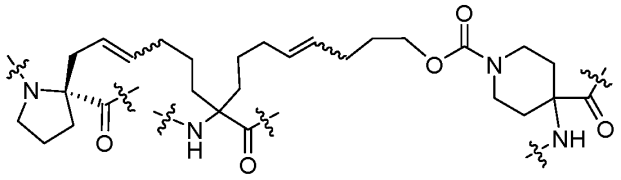


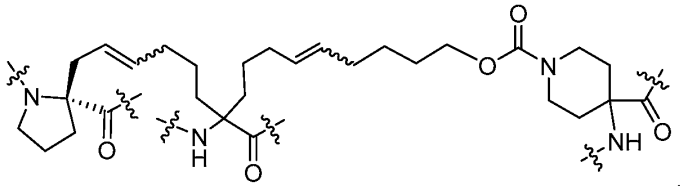


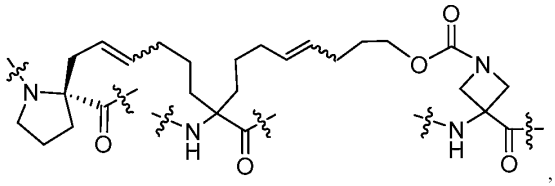


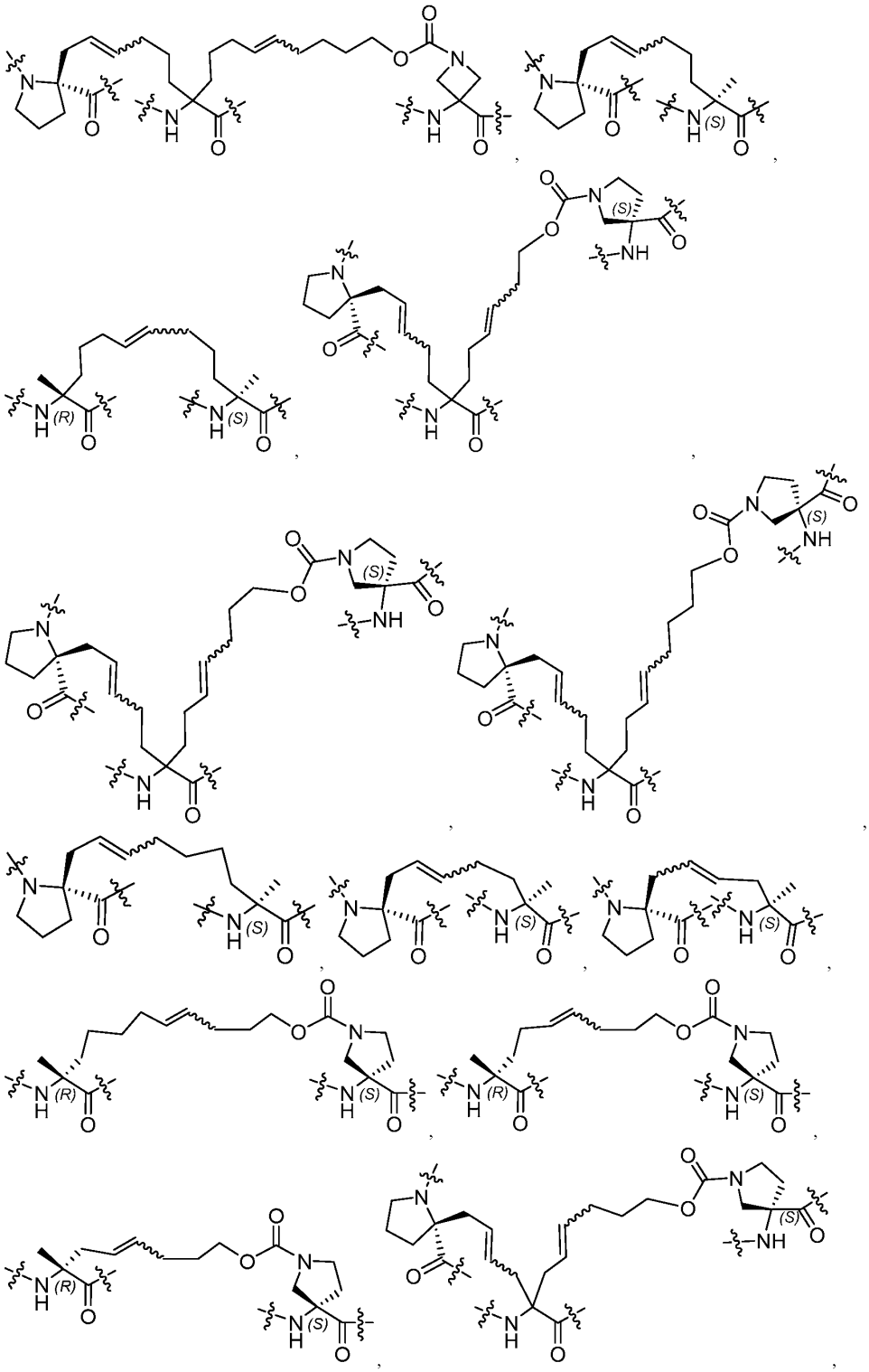


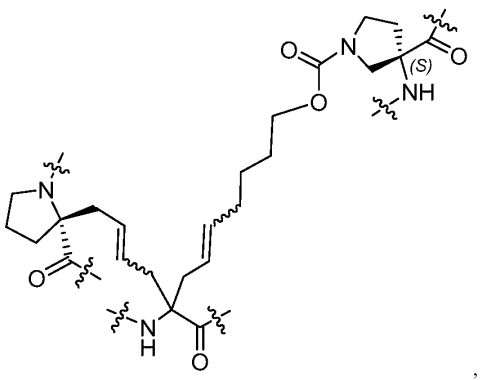


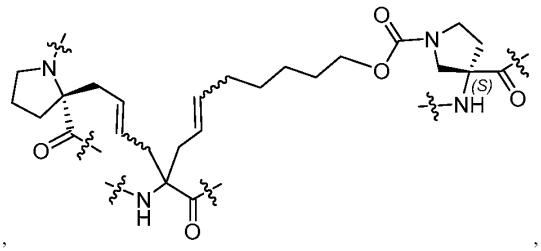


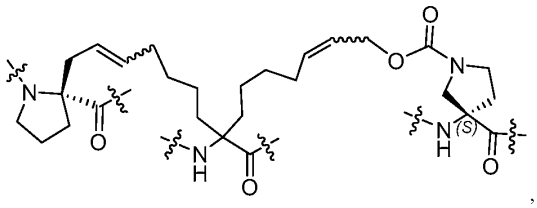


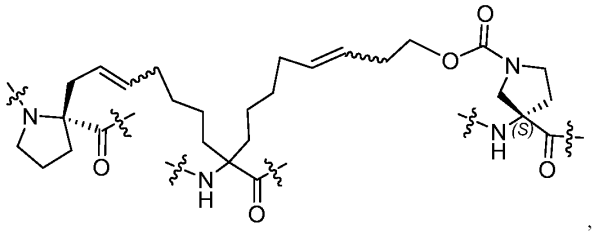


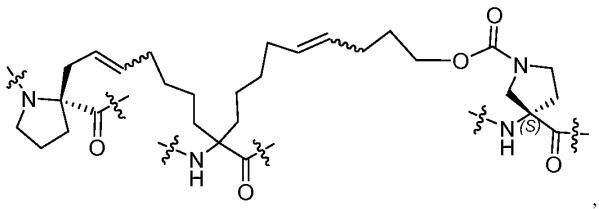


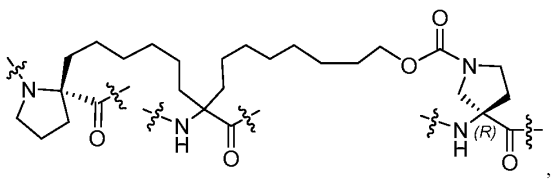


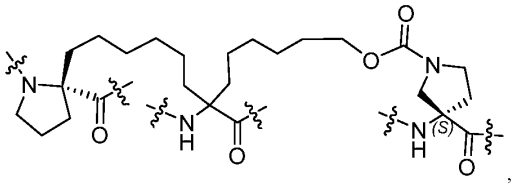


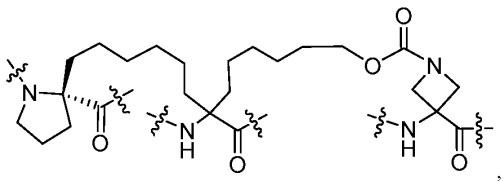


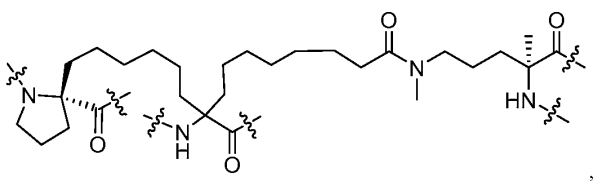


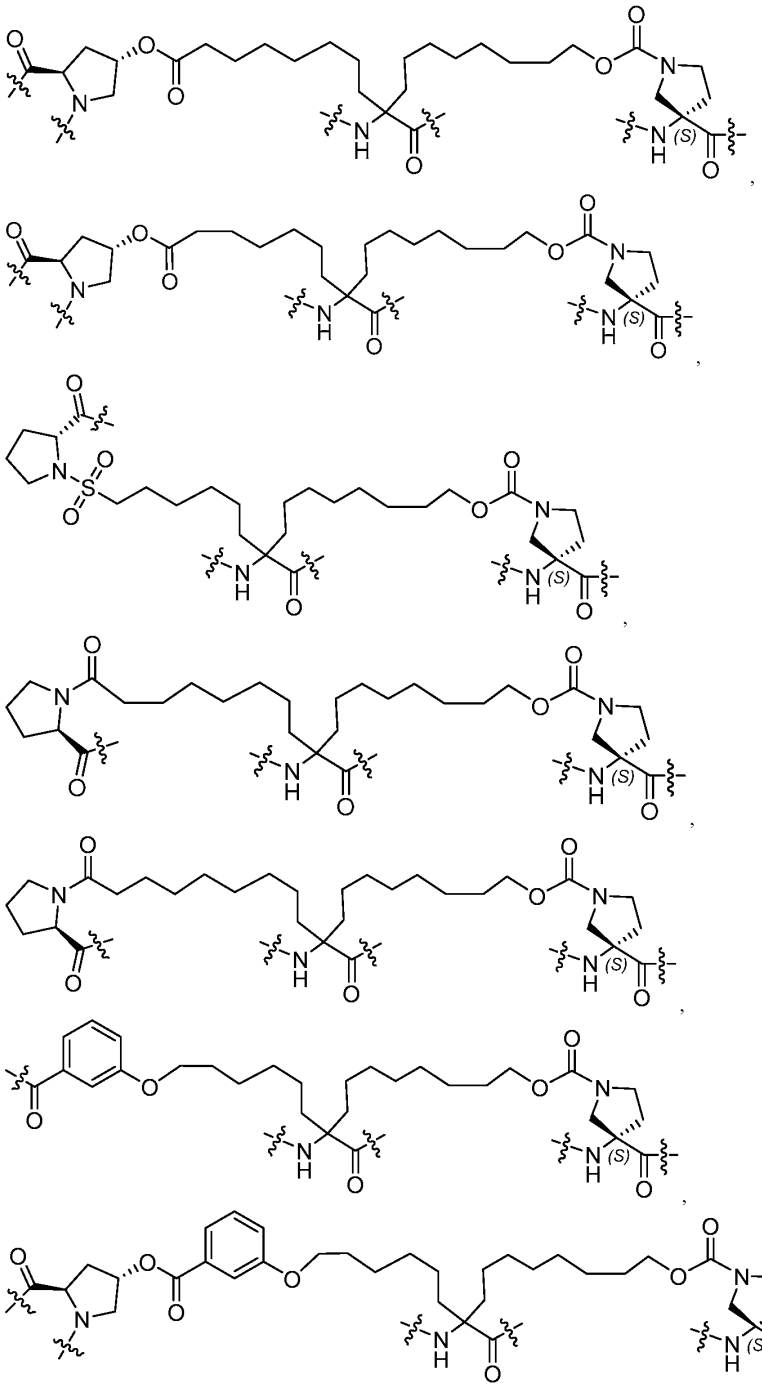


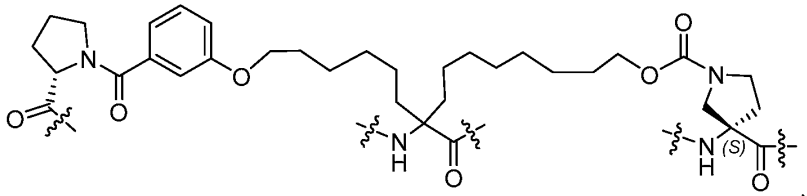


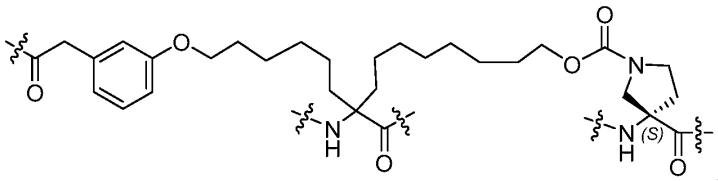


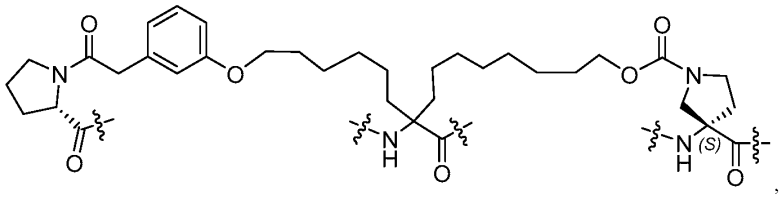


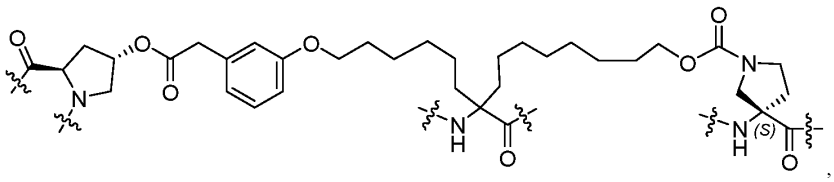


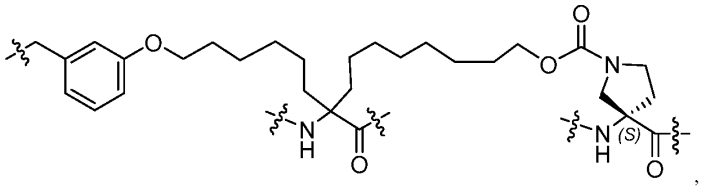


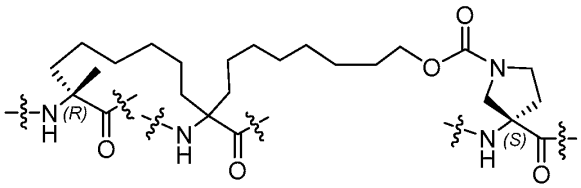


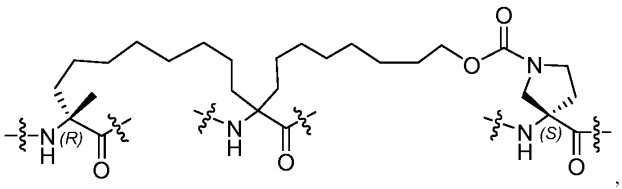


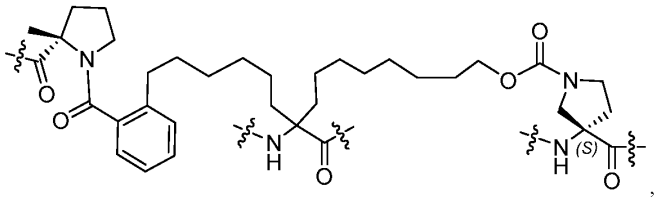


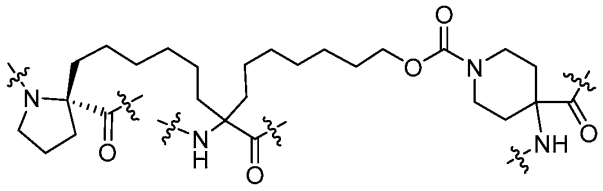


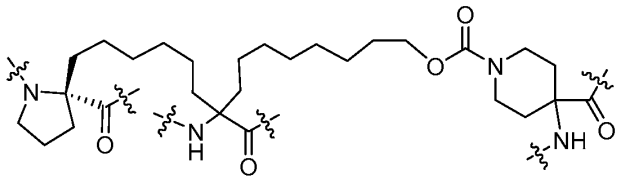


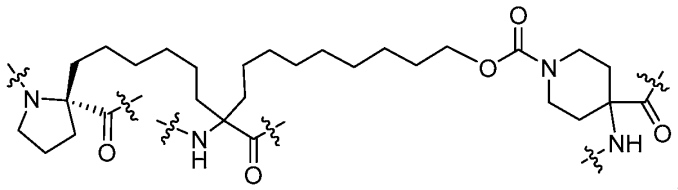


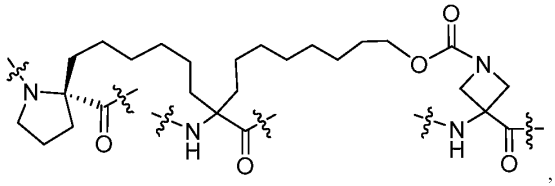


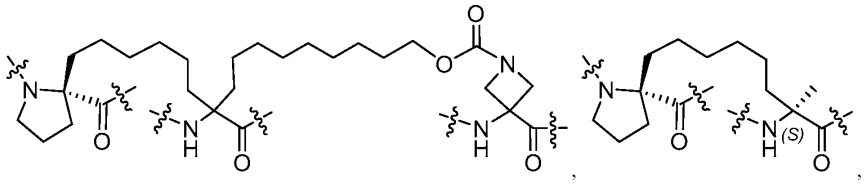


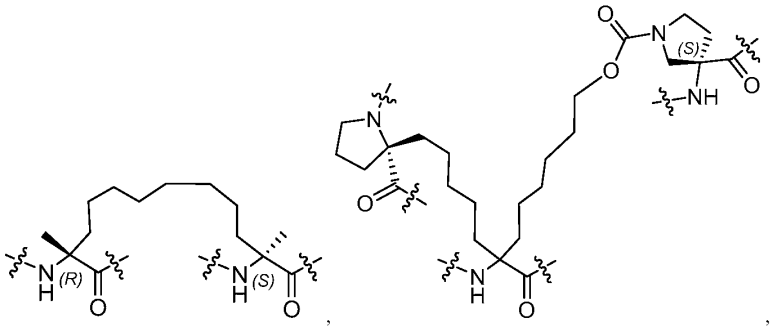


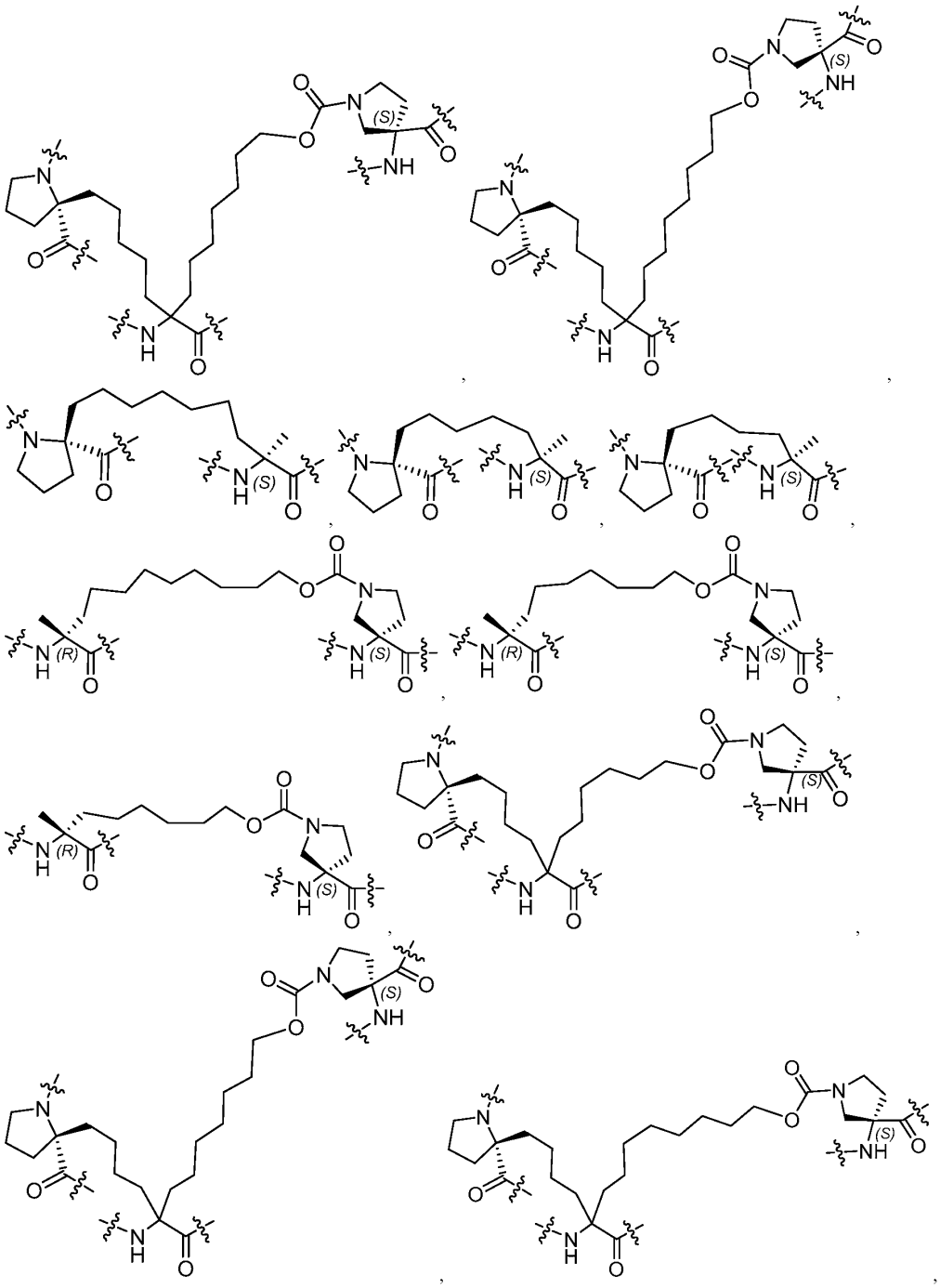


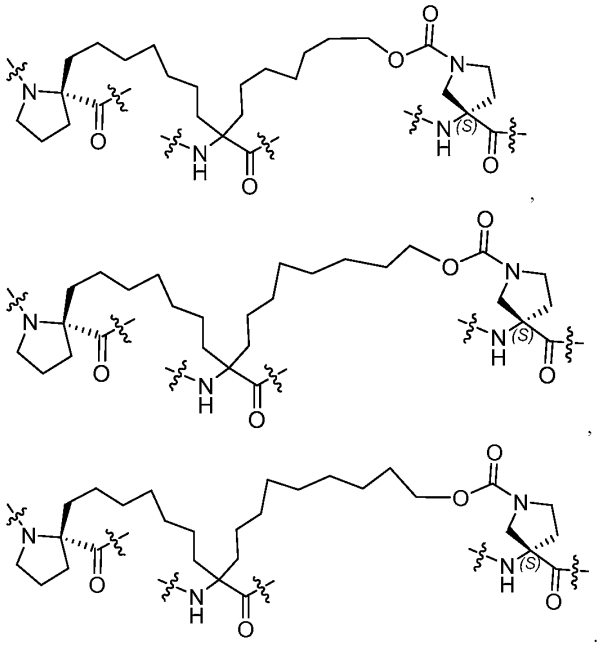


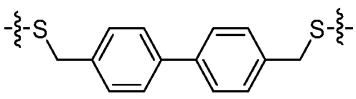
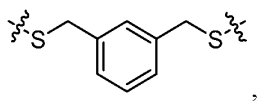
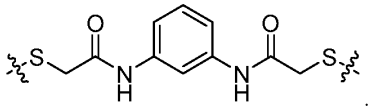
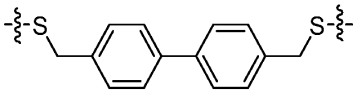
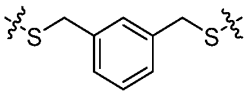
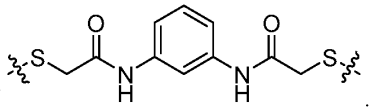


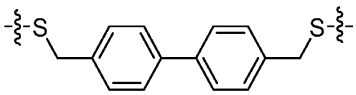
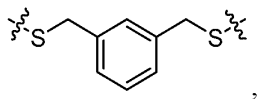
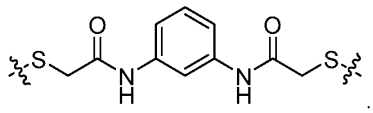
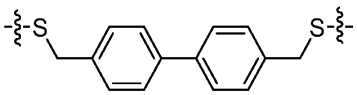
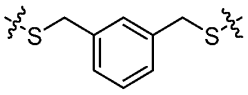
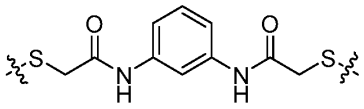








[0191] In some embodiments, a staple comprises −S−. In some embodiments, stapling technologies comprise utilization of one or more, e.g., two or more, sulfur-containing moieties. In some embodiments, a stapled peptide comprises cysteine stapling. In some embodiments, two cysteine residues are stapled wherein the −S− moieties of the two cysteine residues are connected optionally through a linker. In some embodiments, a stapled peptide comprises one and no more than one staples from cysteine stapling. In some embodiments, a stapled peptide comprises one and no more than one staples having the structure of  ,  , or  . In some embodiments, a stapled peptide comprises one and no more than one staples having the structure of  . In some embodiments, a stapled peptide comprises one and no more than one staples having the structure of  . In some embodiments, a stapled peptide comprises one and no more than one staples having the structure of  . In some embodiments, a stapled peptide comprises no staples having the structure of

 ,  , or  . In some embodiments, a stapled peptide comprises no staples having the structure of  . In some embodiments, a stapled peptide comprises no staples having the structure of  . In some embodiments, a stapled peptide comprises no staples having the structure of  .

[0192] In some embodiments, the present disclosure provides useful technologies relating to cysteine stapling. Among other things, the present disclosure appreciates that peptides amenable to cysteine stapling and/or comprising one or more cysteine staples, can be produced and/or assessed in a biological system. The present disclosure further appreciates that certain such systems permit development, production, and/or assessment of cysteine stapled peptides having a range of different structures (e.g., different amino acid sequences), and in fact can provide a user with complete control over selection and implementation of amino acid sequences to be incorporated into stapled peptides.

[0193] Cysteine stapling, as described herein, involves linking one cysteine residue to another cysteine residue, where the resulting bond is not through the peptide backbone between the linked cysteine residues.

[0194] In some embodiments, a stapled peptide as described herein comprises a staple which staple is L^s, wherein:

L^s is $-L^{s1}-S-L^{s2}-S-L^{s3}-$;

L^{s1} and L^{s3} are each independently L;

L^{s2} is L and comprises at least one $-C(O)-$; and

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each $-Cy-$ is independently an optionally substituted bivalent group selected from a C_{3-20} cycloaliphatic ring, a C_{6-20} aryl ring, a 5-20 membered heteroaryl ring having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, and a 3-20 membered

heterocyclyl ring having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon;

each R' is independently −R, −C(O)R, −CO_2R, or −SO_2R;

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, 5-30 membered heteroaryl having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, and 3-30 membered heterocyclyl having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, or

two R groups are optionally and independently taken together to form a covalent bond; or

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon.

[0195] In some embodiments, L is independently a bivalent C_1-C_{25} aliphatic group. In some embodiments, L is independently a bivalent C_1-C_{20} aliphatic group. In some embodiments, L is independently a bivalent C_1-C_{10} aliphatic group. In some embodiments, L is independently a bivalent C_1-C_5 aliphatic group. In some embodiments, L is independently a bivalent C_1 aliphatic group. In some embodiments, L is −CH_2.

[0196] In some embodiments, L^{s1} is −CH_2−. In some embodiments, L^{s3} is −CH_2−. In some embodiments, L^{s1} and L^{s3} are both −CH_2−. In some embodiments, L^s is −CH_2−S−L^{s2}−S−CH_2−.

[0197] In some embodiments, L^{s2} comprises −C(R')$_2$−L'−C(R')$_2$−, wherein L' is described in the present disclosure. In some embodiments, L^{s2} is −L^{x1}−C(O)Q−L'−QC(O)−L^{x1}−, wherein each variable is independently as described in the present disclosure. In some embodiments, L^{s2} is −CH_2C(O)Q−L'−QC(O)CH_2−, wherein each −CH_2− is independently and optionally substituted. In some embodiments, L^{s2} is −CH_2C(O)Q−L'−QC(O)CH_2−.

[0198] In some embodiments, L^{s2} In some embodiments, L^{s2} is L and comprises at least one −C(O)−. In some embodiments, L^{s2} is L and comprises at least two −C(O)−. In some embodiments, L^{s2} is L and comprises at least one −C(O)Q−, wherein Q is selected from the group consisting of: a covalent

bond, −N(R')−, −O−, and –S–. In some embodiments, L^{s2} is L and comprises at least one −C(O)Q−, wherein Q is selected between −N(R')− and −O−. In some embodiments, L^{s2} is L and comprises at least two −C(O)Q−, wherein Q is selected from the group consisting of: −N(R')−, −O−, and –S–. In some embodiments, L^{s2} is L and comprises at least two −C(O)Q−, wherein Q is selected between −N(R')− and −O−. In some embodiments, L^{s2} is L and comprises at least one −C(O)N(R')−. In some embodiments, L^{s2} is L and comprises at least two −C(O)N(R')−. In some embodiments, L^{s2} is L and comprises at least one −C(O)O−. In some embodiments, L^{s2} is L and comprises at least two −C(O)O−.

[0199] In some embodiments, L^{s2} comprises −Q−L'−Q−, wherein Q is independently selected from the group consisting of: −N(R')−, −O−, and −S, wherein L' is described in the present disclosure.

[0200] In some embodiments, L^{s2} comprises −Q−L'−Q−, wherein Q is independently selected between −N(R')− and −O−, wherein L' is described in the present disclosure. In some embodiments, L^{s2} comprises –C(O)Q−L'−QC(O)−, wherein Q is independently selected from the group consisting of: −N(R')−, −O−, and −S, wherein L' is described in the present disclosure. In some embodiments, L^{s2} comprises –C(O)Q−L'−QC(O)−, wherein Q is independently selected between −N(R')− and −O, wherein L' is described in the present disclosure. In some embodiments, L^{s2} comprises –$C(R')_2$C(O)Q−L'−QC(O)$C(R')_2$−, wherein Q is independently selected from the group consisting of: −N(R')−, −O−, and −S, wherein L' is described in the present disclosure. In some embodiments, L^{s2} comprises –$C(R')_2$C(O)Q−L'−QC(O)$C(R')_2$−, wherein Q is independently selected between −N(R')− and −O, wherein L' is described in the present disclosure.

[0201] In some embodiments, L^{s2} comprises −N(R')−L'−N(R')−, wherein L' is described in the present disclosure. In some embodiments, L^{s2} comprises −C(O)N(R')−L'−N(R')C(O)−, wherein L' is described in the present disclosure. In some embodiments, L^{s2} is −$C(R')_2$C(O)N(R')−L'−N(R')C(O)$C(R')_2$−, wherein L' is described in the present disclosure.

[0202] In some embodiments, L^{s2} comprises −O(R')−L'−O(R')−, wherein L' is described in the present disclosure. In some embodiments, L^{s2} comprises −C(O)O−L'−OC(O)−, wherein L' is described in the present disclosure. In some embodiments, L^{s2} is −$C(R')_2$C(O)O−L'−OC(O)$C(R')_2$−, wherein L' is described in the present disclosure.

[0203] In some embodiments, R' is an optionally substituted C_{1-30} aliphatic. In some embodiments, R' is an optionally substituted C_{1-15} aliphatic. In some embodiments, R' is an optionally substituted C_{1-10} aliphatic. In some embodiments, R' is an optionally substituted C_{1-5} aliphatic. In some embodiments, R' is hydrogen.

[0204] In some embodiments, L' is optionally substituted bivalent C_1-C_{19} aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_{15} aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_{10} aliphatic. In some embodiments, L' is optionally substituted

bivalent C_1-C_9 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_8 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_7 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_6 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_5 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_3 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1-C_2 aliphatic. In some embodiments, L' is optionally substituted bivalent C_1 aliphatic. In some embodiments, L' is $-CH_2-$. In some embodiments, L' is $-(CH_2)_2-$. In some embodiments, L' is $-(CH_2)_3-$. In some embodiments, L' is $-(CH_2)_4-$. In some embodiments, L' is $-(CH_2)_5-$. In some embodiments, L' is $-(CH_2)_6-$. In some embodiments, L' is $-(CH_2)_7-$. In some embodiments, L' is $-(CH_2)_8-$.

[0205] In some embodiments, L' is optionally substituted bivalent C_{6-20} aryl ring. In some embodiments, L' is optionally substituted bivalent C_{6-14} aryl ring. In some embodiments, L' is optionally substituted bivalent C_{6-10} aryl ring. In some embodiments, L' is optionally substituted bivalent C_6 aryl ring. In some embodiments, L' is bivalent C_6 aryl substituted with at least one halogen. In some embodiments, L' is bivalent C_6 aryl substituted with at least two halogen. In some embodiments, L' is bivalent C_6 aryl substituted with at least three halogen. In some embodiments, L' is bivalent C_6 aryl substituted with four halogen. In some embodiments, L' is bivalent C_6 aryl substituted with at least one fluorine. In some embodiments, L' is bivalent C_6 aryl substituted with at least two fluorine. In some embodiments, L' is bivalent C_6 aryl substituted with at least three fluorine. In some embodiments, L' is bivalent C_6 aryl substituted with four fluorine. In some embodiments, L' is bivalent C_6 aryl substituted with at least one chlorine. In some embodiments, L' is bivalent C_6 aryl substituted with at least two chlorine. In some embodiments, L' is bivalent C_6 aryl substituted with at least three chlorine. In some embodiments, L' is bivalent C_6 aryl substituted with four chlorine. In some embodiments, L' is bivalent C_6 aryl substituted at with least one $-O(CH2)_{0-4}CH_3$. In some embodiments, L' is bivalent C_6 aryl substituted with at least two $-O(CH2)_{0-4}CH_3$. In some embodiments, L' is bivalent C_6 aryl substituted with at least three $-O(CH2)_{0-4}CH_3$. In some embodiments, L' is bivalent C_6 aryl substituted with four $-O(CH2)_{0-4}CH_3$.

[0206] In some embodiments, L' is bivalent 5-20 membered heteroaryl ring having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon. In some embodiments, L' is bivalent 5-6 membered heteroaryl ring having 1-4 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon. In some embodiments, L' is bivalent 5-6 membered heteroaryl ring having 1-4 heteroatoms independently selected from oxygen, nitrogen, and sulfur. In some embodiments, L' is bivalent 6 membered heteroaryl ring having 1-2 heteroatoms independently selected from oxygen, nitrogen, and sulfur. In some embodiments, L' is bivalent 6 membered heteroaryl ring having 2 nitrogen.

[0207] In some embodiments, L' is optionally substituted bivalent C_{3-20} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-15} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-10} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-9} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-8} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-7} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-6} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-5} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_{3-4} cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_3 cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_4 cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_5 cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_5 cycloalkyl ring. In some embodiments, L' is optionally substituted bivalent C_5 cycloalkenyl ring. In some embodiments, L' is optionally substituted bivalent C_6 cycloaliphatic ring. In some embodiments, L' is optionally substituted bivalent C_6 cycloalkyl ring.

[0208] In some embodiments, L^{s2} comprises −N(R')−L'−N(R')− and L' is a covalent bond. In some embodiments L^{s2} comprises −N(R)−N(R)−, wherein:

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, 5-30 membered heteroaryl having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, and 3-30 membered heterocyclyl having 1-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon, or

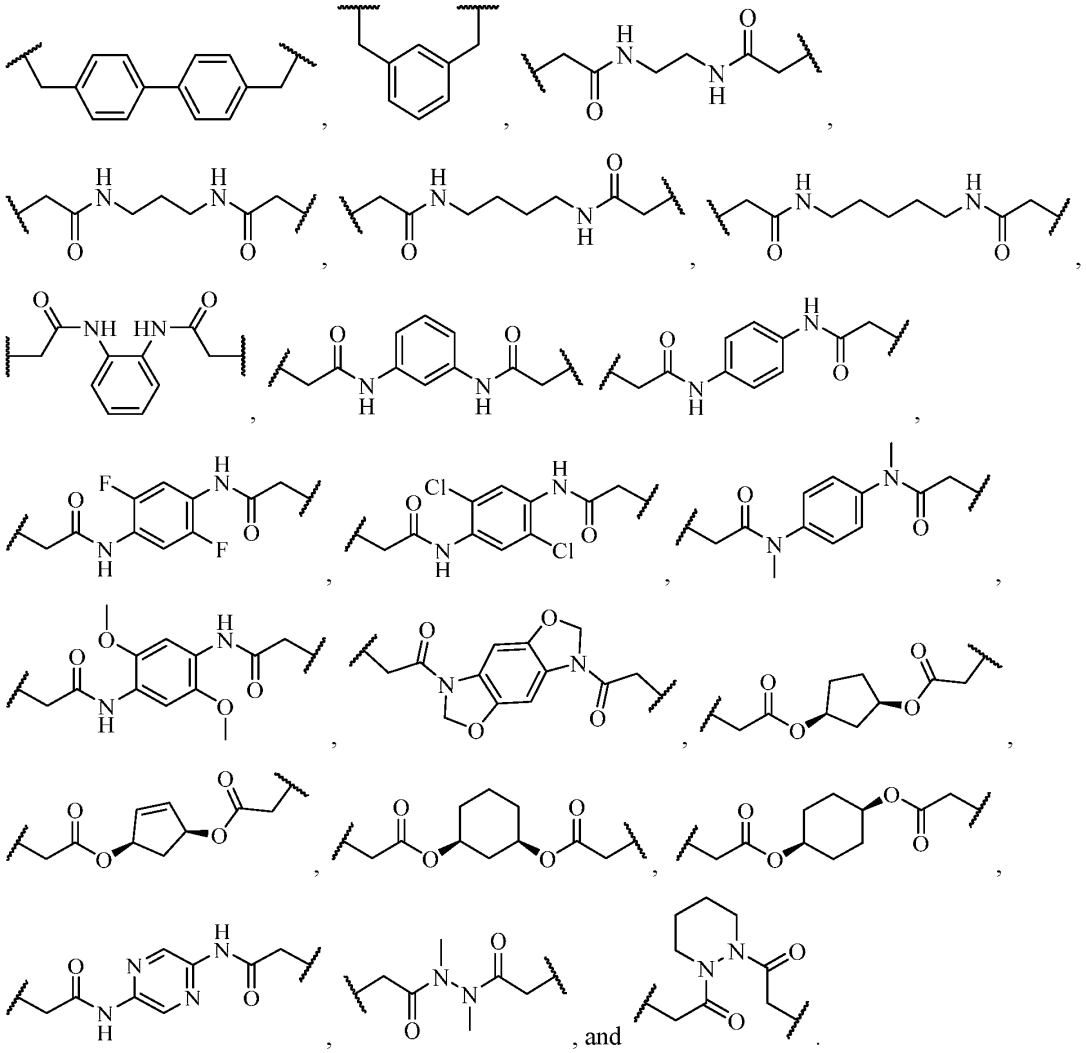
two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon.

[0209] In some embodiments L^{s2} comprises −N(R)−N(R)−, wherein:

each R is independently optionally substituted C_{1-30} aliphatic; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered monocyclic ring.

[0210] In some embodiments, L^{s2} is a staple selected from the group consisting of:



[0211] As those skilled in the art will appreciate, provided technologies can be utilized to prepare collection of peptides using non-cysteine residues and suitable chemistry therefor. For example, in some embodiments, cysteine stapling is replaced with lysine stapling, wherein the cysteine residues for cysteine stapling are replaced with lysine residues for lysine stapling (e.g., using agents that can crosslink two lysine residues, for example, through reactions with side chain amino groups). In some embodiments, for lysine stapling, R^E in various formulae is or comprises an activated carboxylic acid group (e.g., NHS ester group), an imidoester group, etc. Suitable reagents are widely known in the art including many commercially available ones. In some embodiments, cysteine stapling is replaced with methionine stapling. In some embodiments, cysteine residues for cysteine stapling are replaced with methionine residues for methionine stapling. In some embodiments, cysteine stapling is replaced with tryptophan

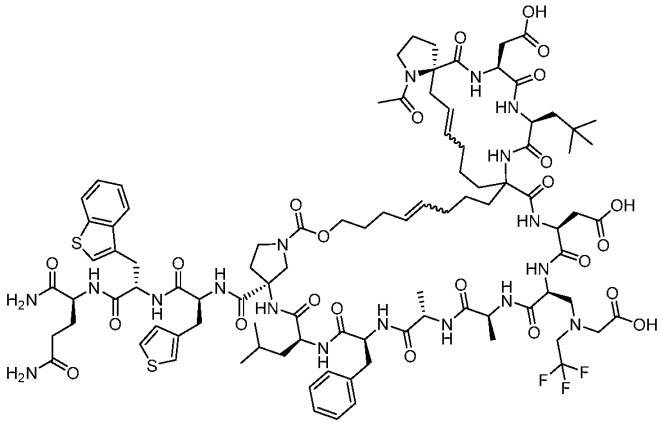
stapling. In some embodiments, cysteine residues for cysteine stapling are replaced with tryptophan residues for tryptophan stapling. As those skilled in the art will appreciate, various technologies (e.g., reagents, reactions, etc.) are described in the art and can be utilized in accordance with the present disclosure for, e.g., methionine stapling, tryptophan stapling, etc. In some embodiments, such stapling can be performed using reagents having various formulae described herein, wherein R^E is or comprises a group that are suitable for methionine and/or tryptophan stapling. In some embodiments, stapling may be performed using one residue at a first position, and a different residue at a second position. Useful reagents for such stapling may comprise a first reactive group for stapling at a first position (e.g., through a first R^E), and a second reactive group for stapling at a second position (e.g., through a second R^E).

[0212] In some embodiments, for various types of stapling (e.g., cysteine stapling, or non-cysteine stapling), stapling is between residues (e.g., cysteine residues for cysteine stapling) separated by two residues (i+3 stapling). In some embodiments, stapling is between residues separated by three residues (i+4 stapling). In some embodiments, stapling is between residues separated by six residues (i+7 stapling).

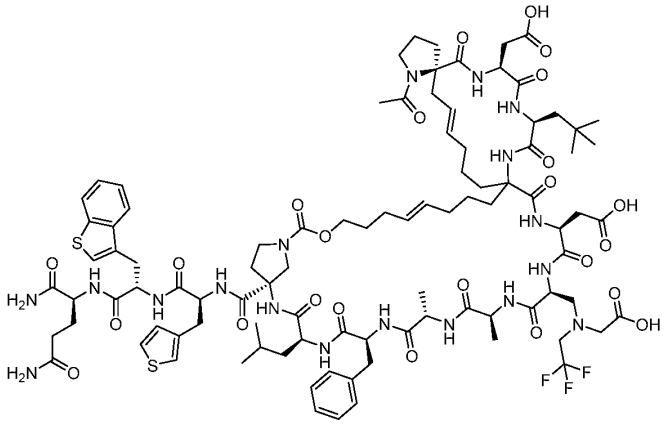
[0213] As appreciated by those skilled in the art, in some embodiments, more than two residues can be stapled at the same time. For example, in some embodiments, three or more cysteines are stapled using crosslinking reagents containing three or more reactive groups (e.g., R^E groups).

[0214] In some embodiments, as described herein, the present disclosure provides useful technologies relating to non-cysteine stapling. Among other things, the present disclosure appreciates that peptides amenable to cysteine stapling and/or comprising one or more non-cysteine staples, can have its cysteine residues and cysteine staple replaced with other amino acids and staples described herein (e.g. hydrocarbon and other non-hydrocarbon amino acid and staples). In some embodiments, the resulting non-cysteine stapled peptide maintains the same or similar interaction with a target of interest when compared to a reference cysteine stapled peptide.

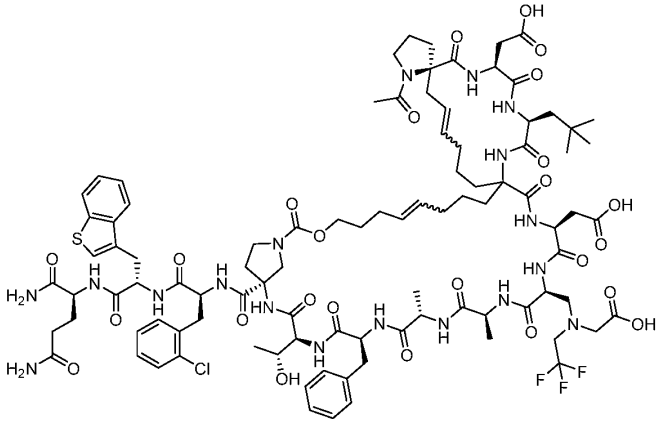
[0215] Certain useful agents (peptides prior to stapling and stapled peptides post stapling) and compositions thereof are presented in Table E3 as examples, which includes various amino acid residues and N- and C-terminus capping groups for various positions as examples; also illustrated are various stapling patterns, e.g., X^1–X^4–X^{11}, X^3–X^{10}, X^4–X^{11}, X^1–X^4 and X^{10}–X^{14}, X^1–X^4 and X^7–X^{14} etc. In some embodiments, a provided agent has a structure selected from Table E3 or a salt thereof. In some embodiments, a provided composition is a composition described in Table E3. As shown, e.g., in Tables E1 and E2 and the Figures, provided technologies can deliver improved useful properties and/or activities. For example, in some embodiments, a provided agent is a stapled peptide having the structure of



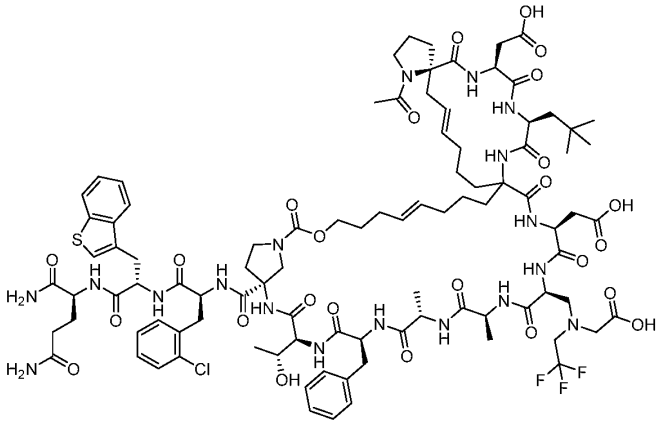
or a salt thereof. In some embodiments, a provided agent is a stapled peptide having the structure of



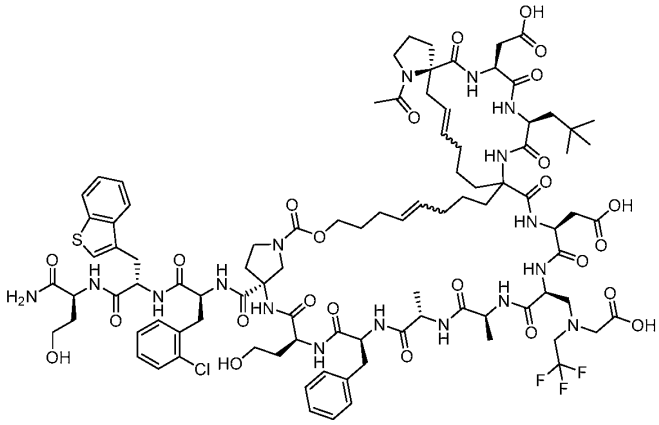
or a salt thereof. In some embodiments, a provided agent is a stapled peptide having the structure of



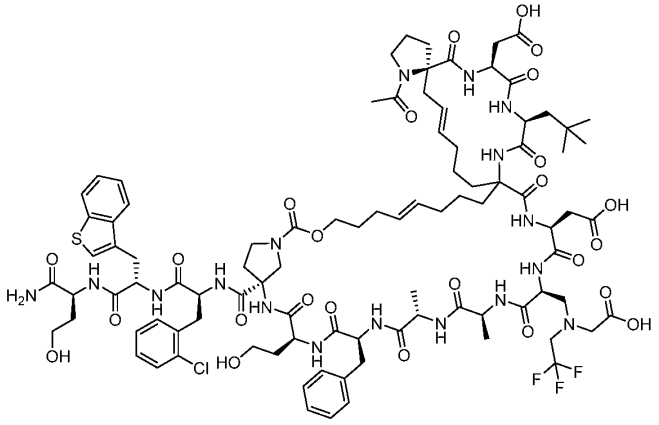
or a salt thereof. In some embodiments, a provided agent is a stapled peptide having the structure of



or a salt thereof. In some embodiments, a provided agent is a stapled peptide having the structure of



or a salt thereof. In some embodiments, a provided agent is a stapled peptide having the structure of



or a salt thereof.

In some embodiments, a double bond of a (i, i+3) staple is *E*. In some embodiments, a double bond of a (i, i+3) staple is *Z*. In some embodiments, a double bond of a (i, i+4) staple is *E*. In some embodiments, a

double bond of a (i, i+4) staple is *Z*. In some embodiments, a double bond of a (i, i+7) staple is *E*. In some embodiments, a double bond of a (i, i+7) staple is *Z*. In some embodiments, both double bonds are *E*. In some embodiments, both double bonds are *Z*. In some embodiments, a (i, i+3) staple is *E*, and the other is *Z*. In some embodiments, a (i, i+3) staple is *Z*, and the other is *E*.

[0216] Agents, e.g., peptides including stapled peptides, can contain various numbers of amino acid residues. In some embodiments, a length of a peptide agent is about 5-20, 5-19, 5-18, 5-17, 5-16, 5-15, 10-20, 10-19, 10-18, 10-17, 10-16, 10-15, 11-20, 11-19, 11-18, 11-17, 11-16, 11-15, 12-20, 12-19, 12-18, 12-17, 12-16, 12-15, 13-20, 13-19, 13-18, 13-17, 13-16, 13-15, 14-20, 14-19, 14-18, 14-17, 14-16, 14-15, or about 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20 amino acid residues. In some embodiments, a length is about 10 amino acid residues. In some embodiments, a length is about 11 amino acid residues. In some embodiments, a length is about 12 amino acid residues. In some embodiments, a length is about 13 amino acid residues. In some embodiments, a length is about 14 amino acid residues. In some embodiments, a length is about 15 amino acid residues. In some embodiments, a length is about 16 amino acid residues. In some embodiments, a length is about 17 amino acid residues. In some embodiments, a length is about 18 amino acid residues. In some embodiments, a length is about 19 amino acid residues. In some embodiments, a length is about 20 amino acid residues.

[0217] Certain useful staples are described in the "Agents" section, below.

Beta-catenin

[0218] Among other things, the present disclosure provides technologies for modulating one or more beta-catenin functions. In some embodiments, the present disclosure provides useful technologies for inhibiting one or more beta-catenin functions that are associated with cancer or hyperplasia. In some embodiments, provided technologies are useful for preventing and treating conditions, disorders or diseases whose prevention and/or treatment will benefits from inhibition of beta-catenin. In some embodiments, a condition, disorder or disease is cancer.

[0219] Beta-catenin is reported to have various functions. For example, it can regulate and coordinate transcription of various genes. It is reported that high beta-catenin activity and/or expression levels may contribute to the development various conditions, disorders or diseases including cancer. Mutations and overexpression of beta-catenin are reported to be associated with conditions, disorders or diseases including many cancers including colorectal cancer, lung cancer, and breast cancer. Dysregulation of the Wnt/β-catenin signaling pathway has reportedly been linked to a number of conditions, disorders or diseases, including neurodegenerative diseases, psychiatric diseases, cancers, asthma, and even wound healing. Agents that can modulate beta-catenin functions are useful for various

purposes including preventing and/or treating various conditions, disorders or diseases associated with beta-catenin.

Binding Sites

[0220] Beta-catenin may interact with various agents at various binding sites each independently comprising a set of amino acid residues that interact with binding agents. For example, certain binding sites are utilized for beta-catenin interactions with Axin, APC, C-cadherin, E-cadherin, TCF3, and Bcl9. For interactions with TCF3, it has been reported that two or more binding sites may be utilized simultaneously to interact with different portions of TCF3. See, e.g., Graham et al. Cell, Vol. 103, 885–896, 2000.

[0221] In some embodiments, provided agents bind to beta-catenin at a unique binding site. In some embodiments, provided agents interact with beta-catenin at a set of amino acid residues that are different from previously reported binding sites, e.g., those for Axin, APC, C-cadherin, E-cadherin, TCF3 or Bcl9.

[0222] For example, in some embodiments, provided agents interact with one or more or all (e.g., about 1-23, 1-20, 1-15, 1-10, 1-5, 5-23, 5-20, 5-15, 5-10, 6-23, 6-20, 6-15, 6-10, 7-23, 7-20, 7-15, 7-10, 8-23, 8-20, 8-15, 8-10, 9-23, 9-20, 9-15, 9-10, 10-23, 10-20, 10-15, 11-23, 11-20, 11-15, 12-23, 12-20, 12-15, 13-23, 13-20, 13-15, 13-23, 14-20, 15-23, 15-20, 16-23, 16-20, 17-23, 17-20, 18-23, or 18-20, or about 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, or 23, etc.) of a set of amino acid residues that are or correspond to amino acid residues in SEQ ID NO: 1, e.g., in some embodiments, the following amino acid residues of SEQ ID NO: 1: A305, Y306, G307, N308, Q309, K312, R342, K345, V346, V349, Q375, R376, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419. In some embodiments, a set of amino acid residues are or correspond to amino acid residues A305, Y306, G307, N308, Q309, K312, R342, K345, V346, V349, Q375, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419 of SEQ ID NO: 1. In some embodiments, a set of amino acid residues are or correspond to amino acid residues A305, Y306, G307, N308, Q309, K312, K345, V346, V349, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419 of SEQ ID NO: 1. In some embodiments, a set of amino acid residues are or correspond to amino acid residues G307, K312, K345, W383, N387, D413, and N415 of SEQ ID NO: 1. In some embodiments, a set of amino acid residues are or correspond to amino acid residues G307, K312, K345, W383, and N387 of SEQ ID NO: 1. In some embodiments, a set of amino acid residues are or correspond to amino acid residues Y306, G307, K312, R386 and N387 of SEQ ID NO: 1. In some embodiments, provided agents interact with Y306 or an amino acid residue corresponding thereto. In some embodiments, provided agents interact with G307 or an amino acid residue corresponding thereto. In some embodiments, provided agents interact with K312 or an amino acid residue corresponding thereto. In some embodiments, provided agents interact

with K345 or an amino acid residue corresponding thereto. In some embodiments, provided agents interact with R386 or an amino acid residue corresponding thereto. In some embodiments, provided agents interact with W383 or an amino acid residue corresponding thereto. In some embodiments, provided agents interact with N387 or an amino acid residue corresponding thereto.

[0223] In some embodiments, a present agent interacts with a polypeptide whose sequence comprises or is SEQ ID NO: 2:
SVLFYAITTLHNLLLHQEGAKMAVRLAGGLQKMVALLNKTNVKFLAITTDCLQILAYGNQESKL IILASGGPQALVNIMRTYTYEKLLWTTSRVLKVLSVCSSNKPAIVEAGGMQALGLHLTDPSQRLV QNCLWTLRNLSDAATKQEGMEGLLGTLVQLLGSDDINVVTCAAGILSNLTCNNYKNKMMVCQ VGGIEALVRT (SEQ ID NO: 2).

[0224] In some embodiments, all amino acid residues that interact with a provided agent is with SEQ ID NO: 2. In some embodiments, amino acid residues that interact with a provided agent (e.g., one or more amino acid residues in an agent) interacts with an agent through hydrogen bonding, hydrophobic interactions or salt bridge. As appreciated by those skilled in the art, when two amino acid residues interacting with each other, they are typically within a certain range of distances when, e.g., assessed using crystallography, NMR, etc.

[0225] In some embodiments, certain amino acid residues reported to interact with one or more polypeptides are not significantly involved in interactions between provided and beta-catenin. In some embodiments, provided agents do not interact with an Axin binding site. In some embodiments, provided agents do not interact with a Bcl9 binding site. In some embodiments, provided agents do not interact with one or more or all of amino acid residues that are or correspond to N426, C429, K435, R469, H470, S473, R474, K508 and N516 of SEQ ID NO: 1. In some embodiments, provided agents do not interact with N426 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with C429 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with K435 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with R469 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with H470 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with S473 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with R474 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with K508 or an amino acid residue corresponding thereto. In some embodiments, provided agents do not interact with N516 or an amino acid residue corresponding thereto.

[0226] In some embodiments, mutation of one or more amino acid residues outside of SEQ ID NO: 2 in beta-catenin does not significant/y (e.g., not exceeding 30%, 40%, 50%, 60%, 70%, 75%, 80%, 85%,

90% or more) reduce interactions of beta-catenin with a provided agent. In some embodiments, mutation of one or more or all of amino acid residues that are or correspond to N426, C429, K435, R469, H470, S473, R474, K508 and N516 of SEQ ID NO: 1 does not significantly reduce interactions of beta-catenin with a provided agent. In some embodiments, mutation of N426 or an amino acid residue corresponding thereto does not significantly reduce interaction of beta-catenin with an agent. In some embodiments, mutation of Q379 or an amino acid residue corresponding thereto (e.g., to Ala, Glu, Phe, Trp, etc.) does not significantly reduce interaction of beta-catenin with an agent.

[0227] In some embodiments, an agent binds to a TCF site of beta-catenin. In some embodiments, an agent interacts with one or more but not all amino acid residues that interact with TCF. In some embodiments, an agent interacts with one or more but not all amino acid residues that interact with an extended region of XTcf3-CBD. In some embodiments, an agent does not interact with beta-catenin amino acid residues that interact with a beta-hairpin module of XTcf3-CBD. In some embodiments, an agent does not interact with beta-catenin amino acid residues that interact with a helix module of XTcf3-CBD. For certain amino acid residues that interact various modules of XTcF3-CBD, see, e.g., Graham et al. Cell, Vol. 103, 885–896, 2000.

[0228] In some embodiments, an agent competes with TCF for beta-catenin binding. In some embodiments, an agent competes with an extended region of TCF (e.g., Ala14-Glu24, or Asp16-Glu24, as described in Graham et al. Cell, Vol. 103, 885–896, 2000) for beta-catenin binding. In some embodiments, compared to an extended region of TCF, an agent does not compete, or competes at a less degree, with Axin for beta-catenin binding. In some embodiments, compared to an extended region of TCF, an agent does not compete, or competes at a less degree, with Bcl9 for beta-catenin binding. In some embodiments, compared to an extended region of TCF, an agent does not compete, or competes at a less degree, with a beta-hairpin module of XTcf3-CBD for beta-catenin binding. In some embodiments, compared to an extended region of TCF, an agent does not compete, or competes at a less degree, with a helix module of XTcf3-CBD for beta-catenin binding. In some embodiments, an agent competes with E-cadherin for beta-catenin binding.

[0229] In some embodiments, the present disclosure provides complexes of peptides (e.g., polypeptides whose sequences are or comprises SEQ ID NO: 1 or 2) and provided agents. In some embodiments, in such complexes polypeptides and provided agents interact with one or more or all amino acid residues as described herein, and optionally do not interact with one or more or all amino acid residues as described herein.

[0230] In some embodiments, the present disclosure provides complexes comprising a provided agent and a beta-catenin polypeptide or a portion thereof. In some embodiments, a portion thereof comprises one or more or all of the interacting residues as described herein. In some embodiments, an

agent and a beta-catenin polypeptide or a portion thereof interact with other at one or more or all of the interacting residues.

Certain Agents

[0231] In some embodiments, the present disclosure provides an agent having the structure of formula I:

$$R^N–L^{P1}–L^{AA1}–L^{P2}–L^{AA2}–L^{P3}–L^{AA3}–L^{P4}–L^{AA4}–L^{P5}–L^{AA5}–L^{P6}–L^{AA6}–L^{P7}–R^C,$$

I

or a salt thereof, wherein:

R^N is a peptide, an amino protecting group or R'–L^{RN}–;

each of L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} is independently L, wherein L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} comprise:

a first R' group and a second R' group which are taken together to form –L^s– which is bonded to the atom to which a first R' group is attached and the atom to which a second R' group is attached; and

a third R' group and a fourth R' group which are taken together to form –L^s– which is bonded to the atom to which a third R' group is attached and the atom to which a fourth R' group is attached;

each L^s is independently –L^{s1}–L^{s2}–L^{s3}–, wherein each L^{s1}, L^{s2} and L^{s3} is independently L;

L^{AA1} is an amino acid residue that comprises a side chain comprising an acidic or polar group;

L^{AA2} is an amino acid residue that comprises a side chain comprising an acidic or polar group;

L^{AA3} is an amino acid residue;

L^{AA4} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

L^{AA5} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

L^{AA6} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

R^C is a peptide, a carboxyl protecting group, –L^{RC}–R', –O–L^{RC}–R' or –N(R')–L^{RC}–R';

each of L^{RN} and L^{RC} is independently L;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with –$C(R')_2$–, –Cy–, –O–, –S–, –S–S–, –N(R')–, –C(O)–,

−C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −$S(O)_2$−, −$S(O)_2$N(R')−, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −L−R, −C(O)R, −CO_2R, or −SO_2R;

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

[0232] In some embodiments, the present disclosure provides an agent having the structure of formula I:

$$R^N–L^{P1}–L^{AA1}–L^{P2}–L^{AA2}–L^{P3}–L^{AA3}–L^{P4}–L^{AA4}–L^{P5}–L^{AA5}–L^{P6}–L^{AA6}–L^{P7}–R^C,$$

I

or a salt thereof, wherein:

R^N is a peptide, an amino protecting group or R'−L^{RN}−;

each of L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} is independently L, wherein L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} comprise:

a first R' group and a second R' group which are taken together to form −L^s− which is bonded to the atom to which a first R' group is attached and the atom to which a second R' group is attached; and

a third R' group and a fourth R' group which are taken together to form −L^s− which is bonded to the atom to which a third R' group is attached and the atom to which a fourth R' group is attached;

each L^s is independently −L^{s1}–L^{s2}–L^{s3}−, wherein each L^{s1}, L^{s2} and L^{s3} is independently L;

L^{AA1} is L^{AR}, wherein a methylene unit is replaced with −C(R')(R^{AS})−, wherein R^{AS} is −L^{AS1}–R^{AA1}, wherein R^{AA1} is −CO_2R or −SO_2R;

L^{AA2} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS2}-R^{AA2}$, wherein R^{AA2} is $-CO_2R$ or $-SO_2R$;

L^{AA3} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS3}-R^{AA3}$, wherein R^{AA3} is R';

L^{AA4} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS4}-R^{AA4}$, wherein R^{AA4} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

L^{AA5} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS5}-R^{AA5}$, wherein R^{AA5} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

L^{AA6} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS6}-R^{AA6}$, wherein R^{AA6} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

R^C is a peptide, a carboxyl protecting group, $-L^{RC}-R'$, $-O-L^{RC}-R'$ or $-N(R')-L^{RC}-R'$;

each of L^{RN} and L^{RC} is independently L;

each L^{AR} is independently an optionally substituted, bivalent C_1-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each of L^{AS1}, L^{AS2}, L^{AS3}, L^{AS4}, L^{AS5}, and L^{AS6} is independently L^{AS};

each R^{AS} is independently $-L^{AS}-R'$;

each L^{AS} is independently an optionally substituted, bivalent C_1-C_{10} aliphatic or heteroaliphatic group having 1-5 heteroatoms, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each $-Cy-$ is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently $-L-R$, $-C(O)R$, $-CO_2R$, or $-SO_2R$;

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

[0233] In some embodiments, a second R' group and a third R' group are attached to the same atom. In some embodiments, none of the first, second and fourth R' groups are attached to the same atom. In some embodiments, each of the first, second, third and fourth R' groups is independently attached to a different atom.

[0234] In some embodiments, a compound of formula I is a stapled peptide as described herein.

[0235] In some embodiments, each L^s is independently a staple as described herein. In some embodiments, L^s, e.g., L^s formed by taking the first and the second R' groups, has a length of 5-20 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms. Unless specified otherwise, a length between two connection sites, e.g., of L^s, L, etc., is the shortest covalent connection from one site to the other. For example, the length of $-CH_2-CH_2-$ is 2 atoms (−C−C−), the length of 1, 3-phenylene is 3 atoms. In some embodiments, L^s, e.g., L^s formed by taking the third and the fourth R' groups, has a length of 5-20 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms. Those skilled in the art reading the present disclosure will appreciate that staples, e.g., L^s, connecting two atoms having a longer distance typically has a longer length than staples connecting two atom having a shorter distance, e.g., (i, i+7) staples typically have longer lengths than (i, i+3) or (i, i+4) staples. In some embodiments, a length is 5 atoms. In some embodiments, a length is 6 atoms. In some embodiments, a length is 7 atoms. In some embodiments, a length is 8 atoms. In some embodiments, a length is 9 atoms. In some embodiments, a length is 10 atoms. In some embodiments, a length is 11 atoms. In some embodiments, a length is 12 atoms. In some embodiments, a length is 13 atoms. In some embodiments, a length is 14 atoms. In some embodiments, a length is 15 atoms. In some embodiments, a length is 16 atoms. In some embodiments, a length is 17 atoms. In some embodiments, a length is 18 atoms. In some embodiments, a length is 19 atoms. In some embodiments, a length is 20 atoms.

L^{P1}

[0236] In some embodiments, L^{P1} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, the length of L^{P1} is 2-10 atoms. In some embodiments, it is 2 atoms. In some embodiments, it is 3 atoms. In some embodiments, it is 4 atoms. In some embodiments, it is 5 atoms. In some embodiments, it is 6 atoms. In some embodiments, it is 7 atoms. In some embodiments, it is 8 atoms. In some embodiments, it is 9 atoms. In some embodiments, it is 10 atoms. In some embodiments, one or more methylene units are independently replaced with $-N(R')-$, $-C(R')_2-$, $-C(O)-$ or $-C(O)N(R')-$. In some embodiments, a methylene unit is replace with $-N(R')-$. In some embodiments, a methylene unit is replace with $-C(R')_2-$. In some embodiments, a methylene unit is replace with $-C(O)-$. In some embodiments, a methylene unit is replace with $-C(O)N(R')-$. In some embodiments, each methylene unit is independently replaced with $-N(R')-$, $-C(R')_2-$ or $-C(O)-$. In some embodiments, L^{P1} is or comprises an amino acid residue. In some embodiments, L^{P1} is or comprises a peptide.

[0237] In some embodiments, L^{P1} is or comprises $-[X]_p-X^1-$, wherein each of p, X and X^1 is independently as described herein, and X^1 is bonded to L^{AA1}. In some embodiments, L^{P1} is or comprises $-X^1-$.

[0238] In some embodiments, L^{P1} comprises a $-C(R')_2-$ group, wherein one of the R' groups is a first R' group of the four. In some embodiments, such a $-C(R')_2-$ group is of an amino acid residue. In some embodiments, such a $-C(R')_2-$ group is of X^1. In some embodiments, such a carbon atom is an alpha carbon of an amino acid residue.

L^{AA1}

[0239] In some embodiments, L^{AA1} is amino acid residue. In some embodiments, L^{AA1} is an amino acid residue that comprises a side chain comprising an acidic or polar group. In some embodiments, L^{AA1} is an amino acid residue that comprises a side chain comprising an acidic group.

[0240] In some embodiments, L^{AA1} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein each variable is independently as described herein. In some embodiments, L^{AA1} is an optionally substituted, bivalent C_1-C_6 (e.g., C_1, C_2, C_3, C_4, C_5, or C_6) aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$, wherein each variable is independently as described herein. In some embodiments, L^{AA1} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with

−C(R')$_2$−, −C(R')(R^{AS})−,−Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein each variable is independently as described herein. In some embodiments, L^{AA1} is −N(R')−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein. In some embodiments, L^{AA1} is −NH−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein.

[0241] In some embodiments, L^{AS1} is L^{AS} as described herein. In some embodiments, R^{AA1} is −CO$_2$R, wherein R is as described herein. In some embodiments, R is H. In some embodiments, L^{AA1} is a residue of an acidic amino acid residue, e.g., Asp, Glu, etc. In some embodiments, L^{AA1} is X^2 as described herein.

L^{P2}

[0242] In some embodiments, L^{P2} is a covalent bond, or an optionally substituted, bivalent C$_2$-C$_6$ aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, the length of L^{P2} is 2-10 atoms. In some embodiments, it is 2 atoms. In some embodiments, it is 3 atoms. In some embodiments, it is 4 atoms. In some embodiments, it is 5 atoms. In some embodiments, it is 6 atoms. In some embodiments, it is 7 atoms. In some embodiments, it is 8 atoms. In some embodiments, it is 9 atoms. In some embodiments, it is 10 atoms. In some embodiments, one or more methylene units are independently replaced with −N(R')−, −C(R')$_2$−, −C(O)− or −C(O)N(R')−. In some embodiments, a methylene unit is replace with −N(R')−. In some embodiments, a methylene unit is replace with −C(R')$_2$−. In some embodiments, a methylene unit is replace with −C(O)−. In some embodiments, a methylene unit is replace with −C(O)N(R')−. In some embodiments, each methylene unit is independently replaced with −N(R')−, −C(R')$_2$− or −C(O)−. In some embodiments, L^{P2} is or comprises an amino acid residue. In some embodiments, L^{P2} is or comprises a peptide.

[0243] In some embodiments, L^{P2} is or comprises −[X]pX^4[X]p'−, wherein each of p, p', X and X^4 is independently as described herein. In some embodiments, L^{P2} is or comprises −[X]pX^{3}X^4[X]p'−, wherein each X and X^{11} is independently an amino acid residue, and each of p and p' is independently 0-10. In some embodiments, L^{P2} is or comprises −X^{3}X^4−, wherein each X^3 and X^4 is independently as described herein, and X^4 is bonded to L^{AA2}.

[0244] In some embodiments, L^{P2} comprises a −C(R')$_2$− group, wherein one of the R' groups is a second R' group and the other is a third of the four. In some embodiments, such a −C(R')$_2$− group is of an amino acid residue. In some embodiments, such a −C(R')$_2$− group is of X^4. In some embodiments,

such a carbon atom is an alpha carbon of an amino acid residue. In some embodiments, such a carbon atom is an alpha carbon of X^4.

L^{AA2}

[0245] In some embodiments, L^{AA2} is amino acid residue. In some embodiments, L^{AA2} is an amino acid residue that comprises a side chain comprising an acidic or polar group. In some embodiments, L^{AA2} is an amino acid residue that comprises a side chain comprising an acidic group.

[0246] In some embodiments, L^{AA2} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein each variable is independently as described herein. In some embodiments, L^{AA2} is an optionally substituted, bivalent C_1-C_6 (e.g., C_1, C_2, C_3, C_4, C_5, or C_6) aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$, wherein each variable is independently as described herein. In some embodiments, L^{AA2} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$, wherein each variable is independently as described herein. In some embodiments, L^{AA2} is $-N(R')-C(R')(R^{AS})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, L^{AA2} is $-NH-C(R')(R^{AS})-C(O)-$, wherein each variable is independently as described herein.

[0247] In some embodiments, L^{AS2} is L^{AS} as described herein. In some embodiments, R^{AA2} is $-CO_2R$, wherein R is as described herein. In some embodiments, R is H. In some embodiments, L^{AA2} is a residue of an acidic amino acid residue, e.g., Asp, Glu, etc. In some embodiments, L^{AA2} is X^5 as described herein.

L^{P3}

[0248] In some embodiments, L^{P3} is a covalent bond. In some embodiments, L^{P3} is an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, the length of L^{P3} is 2-10 atoms. In some embodiments, it is 2 atoms. In some embodiments, it is 3 atoms. In some embodiments, it is 4 atoms. In some embodiments, it is 5 atoms. In some embodiments, it is 6 atoms. In some embodiments, it is 7 atoms. In some embodiments, it is 8 atoms. In some embodiments, it is 9 atoms. In some embodiments, it is 10 atoms. In some embodiments, one or more methylene units are independently replaced with $-N(R')-$,

−C(R')$_2$−, −C(O)− or −C(O)N(R')−. In some embodiments, a methylene unit is replace with −N(R')−. In some embodiments, a methylene unit is replace with −C(R')$_2$−. In some embodiments, a methylene unit is replace with −C(O)−. In some embodiments, a methylene unit is replace with −C(O)N(R')−. In some embodiments, each methylene unit is independently replaced with −N(R')−, −C(R')$_2$− or −C(O)−. In some embodiments, L^{P3} is or comprises an amino acid residue. In some embodiments, L^{P3} is or comprises a peptide.

L^{AA3}

[0249] In some embodiments, L^{AA3} is amino acid residue. In some embodiments, L^{AA3} is an amino acid residue that comprises a side chain comprising an acidic or polar group. In some embodiments, L^{AA3} is an amino acid residue that comprises a side chain comprising an acidic group.

[0250] In some embodiments, L^{AA3} is L^{AR}, wherein a methylene unit is replaced with −C(R')(R^{AS})−, wherein each variable is independently as described herein. In some embodiments, L^{AA3} is an optionally substituted, bivalent C_1-C_6 (e.g., C_1, C_2, C_3, C_4, C_5, or C_6) aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −C(R')(R^{AS})−,−Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein each variable is independently as described herein. In some embodiments, L^{AA3} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −C(R')(R^{AS})−,−Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein each variable is independently as described herein. In some embodiments, L^{AA3} is −N(R')−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein. In some embodiments, L^{AA3} is −NH−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein.

[0251] In some embodiments, L^{AS3} is L^{AS} as described herein. In some embodiments, R^{AA3} is −CO_2R, wherein R is as described herein. In some embodiments, R is H. In some embodiments, L^{AA3} is a residue of an acidic amino acid residue, e.g., Asp, Glu, etc. In some embodiments, L^{AA3} is X^6 as described herein.

L^{P4}

[0252] In some embodiments, L^{P4} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, the length of L^{P4} is 2-10 atoms. In some embodiments, it is 2 atoms. In some

embodiments, it is 3 atoms. In some embodiments, it is 4 atoms. In some embodiments, it is 5 atoms. In some embodiments, it is 6 atoms. In some embodiments, it is 7 atoms. In some embodiments, it is 8 atoms. In some embodiments, it is 9 atoms. In some embodiments, it is 10 atoms. In some embodiments, one or more methylene units are independently replaced with −N(R')−, −C(R')$_2$−, −C(O)− or −C(O)N(R')−. In some embodiments, a methylene unit is replace with −N(R')−. In some embodiments, a methylene unit is replace with −C(R')$_2$−. In some embodiments, a methylene unit is replace with −C(O)−. In some embodiments, a methylene unit is replace with −C(O)N(R')−. In some embodiments, each methylene unit is independently replaced with −N(R')−, −C(R')$_2$− or −C(O)−. In some embodiments, L^{P4} is or comprises an amino acid residue. In some embodiments, L^{P4} is or comprises a peptide.

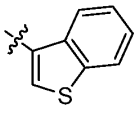
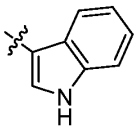
[0253] In some embodiments, L^{P4} is or comprises −[X]pX^{7}X^8[X]p'−, wherein each X and X^{11} is independently an amino acid residue, and each of p and p' is independently 0-10. In some embodiments, L^{P4} is or comprises −X^{7}X^8−, wherein each X^7 and X^8 is independently as described herein, and X^8 is bonded to L^{AA4}.

L^{AA4}

[0254] In some embodiments, L^{AA4} is amino acid residue. In some embodiments, L^{AA4} is an amino acid residue that comprises a side chain comprising an aromatic group.

[0255] In some embodiments, L^{AA4} is L^{AR}, wherein a methylene unit is replaced with −C(R')(R^{AS})−, wherein each variable is independently as described herein. In some embodiments, L^{AA4} is an optionally substituted, bivalent C$_1$-C$_6$ (e.g., C$_1$, C$_2$, C$_3$, C$_4$, C$_5$, or C$_6$) aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −C(R')(R^{AS})−,−Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein each variable is independently as described herein. In some embodiments, L^{AA4} is an optionally substituted, bivalent C$_2$-C$_4$ aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −C(R')(R^{AS})−,−Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein each variable is independently as described herein. In some embodiments, L^{AA4} is −N(R')−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein. In some embodiments, L^{AA4} is −NH−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein.

[0256] In some embodiments, L^{AS4} is L^{AS} as described herein. In some embodiments, R^{AA4} is optionally substituted C$_{6-14}$ aryl. In some embodiments, R^{AA4} is optionally substituted phenyl. In some embodiments, R^{AA4} is phenyl. In some embodiments, R^{AA4} is optionally substituted 10-membered C$_{10}$

bicyclic aryl. In some embodiments, R^{AA4} is optionally substituted 5-membered monocyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA4} is optionally substituted 6-membered monocyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA4} is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA4} is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms. In some embodiments, a heteroaryl has no more than one heteroatom. In some embodiments, a heteroaryl has two or more heteroatoms. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is sulfur. In some embodiments, R^{AA4} is optionally substituted  . In some embodiments, R^{AA4} is optionally substituted  . In some embodiments, R^{AA4} is optionally substituted  . In some embodiments, R^{AA4} is an aromatic amino acid residue as described herein. In some embodiments, R^{AA4} is X^9 as described herein.

L^{P5}

[0257] In some embodiments, L^{P5} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, the length of L^{P5} is 2-10 atoms. In some embodiments, it is 2 atoms. In some embodiments, it is 3 atoms. In some embodiments, it is 4 atoms. In some embodiments, it is 5 atoms. In some embodiments, it is 6 atoms. In some embodiments, it is 7 atoms. In some embodiments, it is 8 atoms. In some embodiments, it is 9 atoms. In some embodiments, it is 10 atoms. In some embodiments, one or more methylene units are independently replaced with $-N(R')-$, $-C(R')_2-$, $-C(O)-$ or $-C(O)N(R')-$. In some embodiments, a methylene unit is replace with $-N(R')-$. In some embodiments, a methylene unit is replace with $-C(R')_2-$. In some embodiments, a methylene unit is replace with $-C(O)-$. In some embodiments, a methylene unit is replace with $-C(O)N(R')-$. In some embodiments, each methylene unit is independently replaced with $-N(R')-$, $-C(R')_2-$ or $-C(O)-$. In some embodiments, L^{P5} is or comprises an amino acid residue. In some embodiments, L^{P5} is or comprises a peptide.

[0258] In some embodiments, L^{P5} is or comprises $-[X]pX^{11}[X]p'-$, wherein each variable is

independently as described herein. In some embodiments, L^{P5} is or comprises $-X^{10}X^{11}-$, wherein each X^{10} and X^{11} is independently as described herein, and X^{11} is bonded to L^{AA5}.

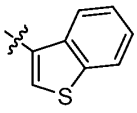
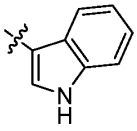
[0259] In some embodiments, L^{P5} comprises a $-C(R')_2-$ group, wherein one of the R' groups is a fourth R' group of the four. In some embodiments, such a $-C(R')_2-$ group is of an amino acid residue. In some embodiments, such a $-C(R')_2-$ group is of X^{11}. In some embodiments, such a carbon atom is an alpha carbon of an amino acid residue. In some embodiments, such a carbon atom is an alpha carbon of X^{11}.

L^{AA5}

[0260] In some embodiments, L^{AA5} is amino acid residue. In some embodiments, L^{AA5} is an amino acid residue that comprises a side chain comprising an aromatic group.

[0261] In some embodiments, L^{AA5} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein each variable is independently as described herein. In some embodiments, L^{AA5} is an optionally substituted, bivalent C_1-C_6 (e.g., C_1, C_2, C_3, C_4, C_5, or C_6) aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$, wherein each variable is independently as described herein. In some embodiments, L^{AA5} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$, wherein each variable is independently as described herein. In some embodiments, L^{AA5} is $-N(R')-C(R')(R^{AS})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, L^{AA5} is $-NH-C(R')(R^{AS})-C(O)-$, wherein each variable is independently as described herein.

[0262] In some embodiments, L^{AS5} is L^{AS} as described herein. In some embodiments, R^{AA5} is optionally substituted C_{6-14} aryl. In some embodiments, R^{AA5} is optionally substituted phenyl. In some embodiments, R^{AA5} is phenyl. In some embodiments, R^{AA5} is optionally substituted 10-membered C_{10} bicyclic aryl. In some embodiments, R^{AA5} is optionally substituted 5-membered monocyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA5} is optionally substituted 6-membered monocyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA5} is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA5} is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms. In some embodiments, a heteroaryl has no more than one heteroatom. In some embodiments, a heteroaryl has two or more heteroatoms. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is nitrogen. In some

embodiments, a heteroatom is sulfur. In some embodiments, R^{AA5} is optionally substituted  . In some embodiments, R^{AA5} is optionally substituted  . In some embodiments, R^{AA5} is optionally substituted  . In some embodiments, R^{AA5} is an aromatic amino acid residue as described herein. In some embodiments, R^{AA5} is X^{12} as described herein.

L^{P6}

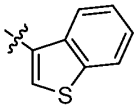
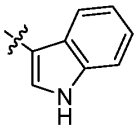
[0263] In some embodiments, L^{P6} is a covalent bond. In some embodiments, L^{P6} is an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, the length of L^{P6} is 2-10 atoms. In some embodiments, it is 2 atoms. In some embodiments, it is 3 atoms. In some embodiments, it is 4 atoms. In some embodiments, it is 5 atoms. In some embodiments, it is 6 atoms. In some embodiments, it is 7 atoms. In some embodiments, it is 8 atoms. In some embodiments, it is 9 atoms. In some embodiments, it is 10 atoms. In some embodiments, one or more methylene units are independently replaced with $-N(R')-$, $-C(R')_2-$, $-C(O)-$ or $-C(O)N(R')-$. In some embodiments, a methylene unit is replace with $-N(R')-$. In some embodiments, a methylene unit is replace with $-C(R')_2-$. In some embodiments, a methylene unit is replace with $-C(O)-$. In some embodiments, a methylene unit is replace with $-C(O)N(R')-$. In some embodiments, each methylene unit is independently replaced with $-N(R')-$, $-C(R')_2-$ or $-C(O)-$. In some embodiments, L^{P6} is or comprises an amino acid residue. In some embodiments, L^{P6} is or comprises a peptide.

L^{AA6}

[0264] In some embodiments, L^{AA6} is amino acid residue. In some embodiments, L^{AA6} is an amino acid residue that comprises a side chain comprising an aromatic group.

[0265] In some embodiments, L^{AA6} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein each variable is independently as described herein. In some embodiments, L^{AA6} is an optionally substituted, bivalent C_1-C_6 (e.g., C_1, C_2, C_3, C_4, C_5, or C_6) aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$,

−S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein each variable is independently as described herein. In some embodiments, L^{AA6} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −C(R')(R^{AS})−,−Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein each variable is independently as described herein. In some embodiments, L^{AA6} is −N(R')−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein. In some embodiments, L^{AA6} is −NH−C(R')(R^{AS})−C(O)−, wherein each variable is independently as described herein.

[0266] In some embodiments, L^{AS6} is L^{AS} as described herein. In some embodiments, R^{AA6} is optionally substituted C_{6-14} aryl. In some embodiments, R^{AA6} is optionally substituted phenyl. In some embodiments, R^{AA6} is phenyl. In some embodiments, R^{AA6} is optionally substituted 10-membered C_{10} bicyclic aryl. In some embodiments, R^{AA6} is optionally substituted 5-membered monocyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA6} is optionally substituted 6-membered monocyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA6} is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms. In some embodiments, R^{AA6} is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms. In some embodiments, a heteroaryl has no more than one heteroatom. In some embodiments, a heteroaryl has two or more heteroatoms. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is sulfur. In some embodiments, R^{AA6} is optionally substituted  . In some embodiments, R^{AA6} is optionally substituted  . In some embodiments, R^{AA6} is optionally substituted  . In some embodiments, R^{AA6} is an aromatic amino acid residue as described herein. In some embodiments, R^{AA6} is X^{13} as described herein.

L^{P7}

[0267] In some embodiments, L^{P7} is a covalent bond. In some embodiments, L^{P7} is an optionally substituted, bivalent C_1-C_{25} (e.g., C_{1-20}, C_{1-15}, C_{1-10}, C_{1-5}, C_1, C_2, C_3, C_4, C_5, C_6, C_7, C_8, C_9, C_{10}, C_{11}, C_{12}, C_{13}, C_{14}, C_{15}, C_{16}, C_{17}, C_{18}, C_{19}, or C_{20}) aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with

−C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, L^{P7} is an optionally substituted, bivalent C_1-C_{25} (e.g., C_{1-20}, C_{1-15}, C_{1-10}, C_{1-5}, C_1, C_2, C_3, C_4, C_5, C_6, C_7, C_8, C_9, C_{10}, C_{11}, C_{12}, C_{13}, C_{14}, C_{15}, C_{16}, C_{17}, C_{18}, C_{19}, or C_{20}) aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, L^{P7} is an optionally substituted, bivalent C_1-C_{20} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, L^{P7} is an optionally substituted, bivalent C_1-C_{15} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, L^{P7} is an optionally substituted, bivalent C_1-C_{10} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−.

L^{AS}

[0268] In some embodiments, L^{AS} is a covalent bond. In some embodiments, L^{AS} is an optionally substituted, bivalent C_1-C_{10} (e.g., C_{1-5}, C_1, C_2, C_3, C_4, C_5, C_6, C_7, C_8, C_9, or C_{10}) aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, L^{AS} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −N(R')−, −C(O)−, −S(O)−, or −S(O)$_2$−. In some embodiments, L^{AS} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with −O−, −S−, or −N(R')−. In some embodiments, L^{AS} is an optionally substituted, bivalent C_1-C_{10} alkylene group. In some embodiments, L^{AS} is optionally substituted −CH_2−. In some embodiments, L^{AS} is −CH_2−. In some embodiments, the length of L^{AS} is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 atoms. In some embodiments, it is 1 atom. In some embodiments, it is 2 atoms. In some embodiments, it is 3 atoms. In some embodiments, it is 4 atoms. In some embodiments, it is 5 atoms. In some embodiments, it is 6 atoms. In some

embodiments, it is 7 atoms. In some embodiments, it is 8 atoms. In some embodiments, it is 9 atoms. In some embodiments, it is 10 atoms.

[0269] In some embodiments, an agent of formula I is a stapled peptide as described herein. In some embodiments, an agent of formula I is an agent selected from Table E2 or a pharmaceutically acceptable salt thereof.

[0270] Among other things, the present disclosure provides agents, e.g. peptides, that can bind to beta-catenin. In some embodiments, a peptide is a stapled peptide. In some embodiments, a peptide is a stitched peptide. In some embodiments, an agent binds to a TCF site of beta-catenin. In some embodiments, an agent competes with TCF for beta-catenin binding.

[0271] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein the agent binds to beta-catenin.

[0272] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein the agent binds to beta-catenin. In some embodiments, X^2 comprises a side chain comprising an acidic or polar group. In some embodiments, X^2 comprises a side chain comprising an acidic. In some embodiments, X^5 comprises a side chain comprising an acidic or polar group. In some embodiments, X^5 comprises a side chain comprising an acidic. In some embodiments, X^9 comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{12} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{13} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling. In some embodiments, X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^{10} and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^7 and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling, and X^4 and X^{11} are

independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling, and X^{10} and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling, and X^7 and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^3 and X^{10} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are stapled. In some embodiments, X^4 and X^{11} are stapled. In some embodiments, X^{10} and X^{14} are stapled. In some embodiments, X^7 and X^{14} are stapled. In some embodiments, X^3 and X^{10} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^4 and X^{11} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^{10} and X^{14} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^7 and X^{14} are stapled.

[0273] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein the agent binds to beta-catenin. In some embodiments, X^2 comprises a side chain comprising an acidic or polar group. In some embodiments, X^2 comprises a side chain comprising an acidic. In some embodiments, X^5 comprises a side chain comprising an acidic or polar group. In some embodiments, X^5 comprises a side chain comprising an acidic. In some embodiments, X^9 comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{12} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{13} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling. In some embodiments, X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling, and X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^3 and X^{10} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are stapled. In some embodiments, X^4 and X^{11} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^4 and X^{11} are stapled. In some embodiments, X^3 and X^{10} are stapled.

[0274] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

[0275] X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or are stapled, X^3 and X^{10} are independently amino acid residues suitable for stapling, or are stapled, X^1 and X^4, and/or X^{10} and X^{14} are independently amino acid residues suitable for stapling, or are stapled, or X^1 and X^4, and/or X^7 and X^{14} are independently amino acid residues suitable for stapling, or are stapled.

[0276] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or are stapled, or X^3 and X^{10} are independently amino acid residues suitable for stapling, or are stapled.

[0277] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0278] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling, or X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0279] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0280] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0281] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0282] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0283] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0284] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0285] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently stapled, or X^3 and X^{10} are independently stapled.

[0286] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently stapled.

[0287] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently stapled.

[0288] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently stapled.

[0289] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently stapled.

[0290] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently stapled.

[0291] In some embodiments, the present disclosure provides an agent, which is or comprises a

peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently stapled.

[0292] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein the agent binds to beta-catenin. In some embodiments, X^2 comprises a side chain comprising an acidic or polar group. In some embodiments, X^2 comprises a side chain comprising an acidic. In some embodiments, X^5 comprises a side chain comprising an acidic or polar group. In some embodiments, X^5 comprises a side chain comprising an acidic. In some embodiments, X^9 comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{12} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{13} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling. In some embodiments, X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^{10} and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^7 and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling, and X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling, and X^{10} and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues

suitable for stapling, and X^7 and X^{14} are independently amino acid residues suitable for stapling. In some embodiments, X^3 and X^{10} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are stapled. In some embodiments, X^4 and X^{11} are stapled. In some embodiments, X^{10} and X^{14} are stapled. In some embodiments, X^7 and X^{14} are stapled. In some embodiments, X^3 and X^{10} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^4 and X^{11} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^{10} and X^{14} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^7 and X^{14} are stapled.

[0293] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein the agent binds to beta-catenin. In some embodiments, X^2 comprises a side chain comprising an acidic or polar group. In some embodiments, X^2 comprises a side chain comprising an acidic. In some embodiments, X^5 comprises a side chain comprising an acidic or polar group. In some embodiments, X^5 comprises a side chain comprising an acidic. In some embodiments, X^9 comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{12} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{13} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling. In some embodiments, X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are independently amino acid residues suitable for stapling, and X^4 and X^{11} are independently amino acid residues suitable for stapling. In some embodiments, X^3 and X^{10} are independently amino acid residues suitable for stapling. In some embodiments, X^1 and X^4 are stapled. In some embodiments, X^4 and X^{11} are stapled. In some embodiments, X^1 and X^4 are stapled, and X^4 and X^{11} are stapled. In some embodiments, X^3 and X^{10} are stapled.

[0294] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21},

X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or are stapled, X^3 and X^{10} are independently amino acid residues suitable for stapling, or are stapled, X^1 and X^4, and/or X^{10} and X^{14} are independently amino acid residues suitable for stapling, or are stapled, or X^1 and X^4, and/or X^7 and X^{14} are independently amino acid residues suitable for stapling, or are stapled.

[0295] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or are stapled, or X^3 and X^{10} are independently amino acid residues suitable for stapling, or are stapled.

[0296] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0297] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling, or X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0298] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0299] In some embodiments, the present disclosure provides an agent, which is or comprises a

peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0300] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0301] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently amino acid residues suitable for stapling.

[0302] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0303] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently amino acid residues suitable for stapling.

[0304] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently stapled, or X^3 and X^{10} are independently stapled.

[0305] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and X^4 and X^{11} are independently stapled.

[0306] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently stapled.

[0307] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently stapled.

[0308] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^3 and X^{10} are independently stapled.

[0309] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently stapled.

[0310] In some embodiments, the present disclosure provides an agent, which is or comprises a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$$
$$[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein:

each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^4 and X^{11} are independently stapled.

[0311] Various types of amino acid residues can be used for X^1, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^1 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^1 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^1 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0312] As shown herein (e.g., for various amino acids and residues thereof), in various embodiments, L^a is L as described herein. For example, in some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-

10. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, one or more methylene units of L are independently replaced with −C(O)−, −N(R')−, −Cy− or −O−. In some embodiments, a methylene unit is replaced with −C(O)−. In some embodiments, a methylene unit is replaced with −N(R')−. In some embodiments, a methylene unit is replaced with −Cy−. In some embodiments, −Cy− is optionally substituted phenylene. In some embodiments, −Cy− is 1,2-phenylene. In some embodiments, a methylene unit is replaced with −O−. In some embodiments, L is $-C(O)-(CH_2)n-$. In some embodiments, L is $-C(O)-(CH_2)_2-$. In some embodiments, L is $-C(O)-(CH_2)_3-$. In some embodiments, L is $-C(O)-1,2\text{-phenylene}-O-CH_2-$. As appreciated by those skilled in the art, embodiments described for each group or moiety, e.g., L, is applicable to all groups that can be such a group or moiety (e.g., L^a, L^{s1}, L^{s2}, L^{s3}, etc.), no matter where such embodiments are described.

[0313] In some embodiments, X^1 a residue of amino acid that comprises an optionally substituted ring. In some embodiments, the amino group of X^1 is part of an optionally substituted ring. In some embodiments, X^1 is an amino acid as described herein (e.g., of formula A-I, A-II, A-III, etc.), wherein R^{a1} and R^{a3} are taken together to form an optionally substituted ring, e.g., an optionally substituted 3-10 membered ring. In some embodiments, R^{a1} and R^{a3} are taken together with their intervening atoms to form an optionally substituted 3-10 membered saturated or partially saturated ring having, in addition to the intervening atoms, 0-5 heteroatoms. In some embodiments, a formed ring is saturated. In some embodiments, a formed ring is monocyclic. In some embodiments, a formed ring has no heteroatoms in addition to the intervening atoms. In some embodiments, L^{a1} and L^{a2} are covalent bond. In some embodiments, a formed ring is unsubstituted. In some embodiments, a formed ring is substituted. In some embodiments, a substitute comprises a double bond which is suitable for metathesis with another double bond to form a staple. In some embodiments, X^1 is Pro. In some embodiments, X^1 is alphaMePro (methyl replacing −H at alpha carbon). In some embodiments, X^1 comprises a hydrophobic side chain. In some embodiments, side chain of X^1 comprises an optionally substituted aromatic ring. In some embodiments, X^1 is Phe. In some embodiments, X^1 is Ala. In some embodiments, none of R^{a2} and R^{a3} are hydrogen. In some embodiments, X^1 is Aib. In some embodiments, X^1 is comprises a side chain which comprises an acidic group, e.g., −COOH. In some embodiments, X^1 is Asp. In some embodiments, X^1 is an amino acid reside suitable for stapling. In some embodiments, X^1 comprises a double bond, e.g., a terminal double bond in its side chain. In some embodiments, X^1 is PL3.

[0314] In some embodiments, X^1 is an amino acid reside suitable for stapling.

[0315] In some embodiments, an amino acid residue suitable for stapling comprises a double bond, e.g., a terminal double bond in its side chain. In some embodiments, it has a side chain having the structure of $--L^a-CH=CH_2$. In some embodiments, it is a residue of an amino acid having the structure of

formula A-II or A-III or a salt thereof. In some embodiments, X^1 is $-N(R^{a1})-L^{a1}-C(-L^a-CH=CH_2)(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^1 is $-N(R^{a1})-C(-L^a-CH=CH_2)(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^1 is a residue of PL3 and stapled.

[0316] In some embodiments, X^1 is or comprises a residue of an amino acid or a moiety selected from Table A-I, Table A-II, Table A-III and Table A-IV.

[0317] In some embodiments, X^1 is a residue of Bn3OAllyl, BzAm3Oallyl, HypBzEs3OAllyl, HypEs4, HypEs5, HypPAc3OAllyl, MePro, NMebAla, PAc3OAllyl, ProAm5, ProAm6, ProBzAm3OAllyl, ProPAc3OAllyl, ProSAm3, PyrR, Sar, Aib, Ala, Asp, Gly, Phe, PL3, Pro, R3, or R5.

[0318] In some embodiments, X^1 is a residue of Bn3OAllyl, BzAm3Oallyl, HypBzEs3OAllyl, HypEs4, HypEs5, HypPAc3OAllyl, MePro, NMebAla, PAc3OAllyl, ProAm5, ProAm6, ProBzAm3OAllyl, ProPAc3OAllyl, ProSAm3, PyrR, or Sar.

[0319] In some embodiments, X^1 is a residue of Aib, Ala, Asp, Gly, Phe, PL3, Pro, R3, or R5.

[0320] In some embodiments, X^1 is stapled (a staple bonds to X^1). In some embodiments, X^1 is PL3 and stapled. In some embodiments, X^1 is stapled with X^4. In some embodiments, a staple connecting a pair of amino acid residues, e.g., X^1 and X^4, has the structure of L^s, $-L^{s1}-L^{s2}-L^{s3}-$, wherein L^{s1} is L^a of one amino acid residue, e.g., X^1, and L^{s3} is L^a of the other amino acid residue, e.g., X^4.

[0321] As described herein, in some embodiments, a staple is L^s. In some embodiments, L^{s1} is L^a of one amino acid residue of a pair of stapled amino acid residues, and L^{s3} is L^a of the other amino acid residue of a pair of stapled amino acid residues. In some embodiments, L^s is $-L^a-L^{s2}-L^a-$, wherein each variable is independently as described herein. Various embodiments of L^a are described herein. In some embodiments, L^{s1} is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L^{s3} is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, each of L^{s1} and L^{s3} is independently an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, each of L^{s1} and L^{s3} is independently $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L^{s1} is $-CH_2-$. In some embodiments, L^{s3} is $-(CH_2)_3-$.

[0322] In some embodiments, L^{s2} is L as described herein. In some embodiments, L is optionally substituted $-CH=CH-$. In some embodiments, L is optionally substituted $-CH_2-CH_2-$. In some embodiments, L is $-CH_2-CH_2-$.

[0323] In some embodiments, L^s is $-CH_2-CH=CH-(CH_2)_3-$. In some embodiments, L^s is $-(CH_2)_6-$. In some embodiments, such a staple connects X^1 and X^4. In some embodiments, such a staple may connect other pairs of stapled amino acid residues.

[0324] In some embodiments, a staple, e.g., L^s, is bonded to two backbone atoms. In some embodiments, it is bonded to two carbon backbone atoms. In some embodiments, it is independently

bonded to an alpha carbon atom of an amino acid residue at each end.

[0325] Various types of amino acid residues can be used for X^2, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^2 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^2 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^2 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0326] In some embodiments, X^2 is a residue of amino acid that comprises an acidic or polar group. In some embodiments, X^2 is a residue of amino acid whose side chain comprises an acidic group, e.g., a $-COOH$ group or a salt form thereof (e.g., a compound of formula A-IV, etc.) (in some embodiments, may be referred to as an "acidic amino acid residue").

[0327] In some embodiments, an amino acid residue whose side chain comprises an acidic group comprises $-COOH$ in its side chain. In some embodiments, it is a residue of an amino acid having the structure of formula A-IV or a salt thereof. In some embodiments, it is a residue of amino acid having the structure of formula PA, PA-a, PA-b, PA-c, etc. In some embodiments, R^{PA} is $-H$ and R^{PS} and R^{PC} are $-OH$. In some embodiments, it is $-N(R^{a1})-L^{a1}-C(-L^{a}-COOH)(R^{a3})-L^{a2}-C(O)-$. In some embodiments, it is $-NH-L^{a1}-C(-L^{a}-COOH)(R^{a3})-L^{a2}-C(O)-$. In some embodiments, it is $-NH-CH(-L^{a}-COOH)-C(O)-$.

[0328] As described herein, L^a is L as described herein. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$ wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$.

[0329] In some embodiments, X^2 is a residue of Asp, Glu, RbGlu, SbGlu, NMeD, and isoDAsp. In some embodiments, X^2 is a residue of Asp, Glu, RbGlu, SbGlu, and isoDAsp. In some embodiments, X^2 is a residue of Asp. As appreciated by those skilled in the art, at physiological pH (about pH 7.4), an acidic group such as $-COOH$ may exist, in some embodiments, predominantly, as its negatively charged

form, e.g., $-COO^-$.

[0330] In some embodiments, X^2 is a residue of amino acid (e.g., of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof) whose side chain comprises a polar group (in some embodiments, may be referred to as a "polar amino acid residue"; in some embodiments, it does not include amino acid residue whose side chains are electrically charged at, e.g., about pH 7.4).

[0331] In some embodiments, an amino acid residue whose side chain comprises a polar group is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$. In some embodiments, an amino acid residue whose side chain comprises a polar group is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$. In some embodiments, an amino acid residue whose side chain comprises an amide group, e.g., $-C(O)N(R')_2$ such as $-CONH_2$. In some embodiments, R^{a2} is $-L^a-C(O)N(R')_2$ wherein each variable is independently as described herein. In some embodiments, R^{a2} is $-L^a-C(O)NH_2$ wherein L is independently as described herein. In some embodiments, L^a is L' as described herein. In some embodiments, R^{a3} is H. In some embodiments, such a polar amino acid residue is Asn. In some embodiments, it is MeAsn. In some embodiments, an amino acid residue whose side chain comprises a polar group is an amino acid residue whose side chain comprises $-OH$. In some embodiments, R^{a2} is $-L^a-OH$ wherein each variable is independently as described herein. In some embodiments, R^{a2} is $-L^a-OH$ wherein L is independently as described herein. In some embodiments, L^a is L' as described herein. For example, in some embodiments, such an amino acid residue is a residue of Hse, Ser, aThr, or Thr. In some embodiments, it is a residue of Hse, Ser, or aThr. In some embodiments, it is a residue of Hse. In some embodiments, it is a residue of Ser. In some embodiments, it is a residue of aThr. In some embodiments, it is a residue of Thr. Other polar amino acid residues are described herein and can be utilized at various amino acid residue positions.

[0332] In some embodiments, X^2 is a residue of amino acid whose side chain comprises $-OH$. For example, in some embodiments, X^2 is a residue of Hse. In some embodiments, X^2 is a residue of amino acid whose side chain comprises an amide group, e.g., $-CONH_2$. For example, in some embodiments, X^2 is a residue of Asn.

[0333] In some embodiments, X^2 comprises a side chain which is hydrophobic, is aliphatic, is aromatic, etc.

[0334] In some embodiments, X^2 is a residue of Asp, Asn, RbGlu, Phe, Glu, Ile, NMeD, Ala, Dab, Gln, His, Hse, isoDAsp, Leu, Ser, tetz, [MeSO2]Dap, [Tf]Dap, 3FF, 3MeF, SbGlu, or Tyr. In some embodiments, X^2 is selected from Asp, Hse, Asn, Glu, RbGlu, SbGlu, and isoDAsp (as appreciated by those skilled in the art, an amino acid code can refer to an amino acid and/or a residue thereof depending on context).

[0335] In some embodiments, X^2 is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0336] In some embodiments, X^2 is a residue of [CH2CMe2CO2H]TriAzDap, [CMe2CO2H]TriAzDap, [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AcAsp, AspSH, RbOHAsp, [MeSO2]Dap, [Tf]Dap, 2COOHF, 3COOHF, 3FF, 3MeF, 4Thz, 4Tria, Aad, Ala, Asn, Asp, Dab, Gln, Glu, His, Hse, Ile, isoDAsp, Leu, NMeD, Phe, PL3, R3, R5, RbGlu, SbGlu, Ser, tetz, TfeGA, Thr, or Tyr.

[0337] In some embodiments, X^2 is a residue of [CH2CMe2CO2H]TriAzDap, [CMe2CO2H]TriAzDap, [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AcAsp, AspSH, or RbOHAsp.

[0338] In some embodiments, X^2 is a residue of [MeSO2]Dap, [Tf]Dap, 2COOHF, 3COOHF, 3FF, 3MeF, 4Thz, 4Tria, Aad, Ala, Asn, Asp, Dab, Gln, Glu, His, Hse, Ile, isoDAsp, Leu, NMeD, Phe, PL3, R3, R5, RbGlu, SbGlu, Ser, tetz, TfeGA, Thr, or Tyr.

[0339] Various types of amino acid residues can be used for X^3, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^3 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^3 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^3 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0340] In some embodiments, L^a is L as described herein. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-CH_2-N(R')-CH_2-$. In some embodiments, R' is Bn. In some embodiments, R' is $-C(O)R$. In some embodiments, R is phenyl. In some embodiments, R is t-butyl. In some embodiments, R is cyclohexyl.

[0341] In some embodiments, X^3 is a hydrophobic amino acid residue.

[0342] In some embodiments, a hydrophobic amino acid residue is an amino acid residue whose side

chain is an optionally substituted aliphatic group. In some embodiments, it is a residue of an amino acid whose side chain is optionally substituted C_{1-10} alkyl. In some embodiments, it is a residue of an amino acid whose side chain is C_{1-10} alkyl. In some embodiments, it is a residue of an amino acid whose side chain is C_{1-10} aliphatic optionally substituted with one or more non-polar and non-charged groups. In some embodiments, it is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more non-polar and non-charged groups. In some embodiments, it is a residue of an amino acid whose side chain is C_{1-10} aliphatic optionally substituted with one or more hydrophobic substituents. In some embodiments, it is a residue of an amino acid whose side chain is C_{1-10} aliphatic. In some embodiments, it is a residue of an amino acid whose side chain is C_{1-10} alkyl. Various hydrophobic amino acid residues can be utilized in accordance with the present disclosure.

[0343] In some embodiments, a hydrophobic amino acid residue, e.g., X^3, has the structure of $-NH_2-C(R^{a2})(R^{a3})-C(O)-$ or $-NH-C(R^{a2})H-C(O)-$ wherein each variable is independently as described herein. As described herein, R^{a2} is $-L^a-R'$. In some embodiments, R' is R as described herein. In some embodiments, R is optionally substituted group selected from C_{1-10} aliphatic, phenyl, 10-membered aryl, and 5-10 membered heteroaryl having 1-5 heteroatoms. In some embodiments, each substituent, if any, is independently a non-polar group. In some embodiments, R is optionally substituted C_{1-10} aliphatic. In some embodiments, R is optionally substituted C_{1-10} alkyl. In some embodiments, R is C_{1-10} aliphatic. In some embodiments, R is C_{1-10} alkyl. For example, in some embodiments, R is methyl. In some embodiments, R is isopropyl. In some embodiments, R is 1-methylpropyl. In some embodiments, R is 2-methylpropyl. In some embodiments, R is optionally substituted aryl. In some embodiments, R is aryl. In some embodiments, R is optionally substituted phenyl. In some embodiments, R is phenyl. In some embodiments, R is optionally substituted 5-6 membered heteroaryl having 1-4 heteroatoms. In some embodiments, R is optionally substituted 5-6 membered heteroaryl having 1 heteroatom. In some embodiments, R is 5-6 membered heteroaryl having 1-4 heteroatoms. In some embodiments, R is 5-6 membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 9-10 membered heteroaryl having 1-5 heteroatoms. In some embodiments, R is optionally substituted 9-10 membered heteroaryl having 1 heteroatom. In some embodiments, R is 9-10 membered heteroaryl having 1-4 heteroatoms. In some embodiments, R is 9-10 membered heteroaryl having 1 heteroatom. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is oxygen. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is

$-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, a hydrophobic amino acid residue is a residue of Ala, Val, Ile, Leu, Met, Phe, Tyr, Trp, etc. Other hydrophobic amino acid residues are described herein and can be utilized at various amino acid residue positions.

[0344] In some embodiments, X^3 comprises a side chain comprising a cycloaliphatic group (e.g., a 4-, 5-, or 6-membered cycloalkyl group).

[0345] In some embodiments, X^3 comprises a side chain which is or comprises an optionally substituted aromatic group (in some embodiments, may be referred to as an "aromatic amino acid residue").

[0346] In some embodiments, an aromatic amino acid residue has a side chain which is or comprises an optionally substituted aromatic group. In some embodiments, an aromatic amino acid residue, e.g., X^3, has the structure of $-NH_2-C(R^{a2})(R^{a3})-C(O)-$ or $-NH-C(R^{a2})H-C(O)-$ wherein each variable is independently as described herein, and R^{a2} comprises an optionally substituted aromatic group.

[0347] In some embodiments, an aromatic amino acid residue has a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently halogen. In some embodiments, it comprises a side chain which is or comprises two optionally substituted aromatic groups. In some embodiments, it comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen or $-OH$. In some embodiments, an aromatic group is phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 0-5 heteroatoms. In some embodiments, an aromatic group is optionally substituted 9-10 membered bicyclic aryl or heteroaryl having one heteroatom. In some embodiments, it is a residue of an amino acid of formula A-I or a salt thereof. In some embodiments, an amino acid residue has the structure of $-NH-C(R^{a2})(R^{a3})-C(O)-$ or $-NH-CH(R^{a3})-C)O)-$. As described herein, R^{a3} is $-L^a-R'$ wherein each variable is independently as described herein. In some embodiments, R' is an optionally substituted group selected from phenyl, 10-membered bicyclic aryl, 5-6 membered heteroaryl having 1-4 heteroatoms, and 9-10 membered bicyclic heteroaryl having 1-5 heteroatoms. In some embodiments, each substituent is independently halogen or $-OH$. In some embodiments, R' is optionally substituted phenyl. In some embodiments, R' is phenyl. In some embodiments, R' is optionally substituted aryl. In some embodiments, R' is aryl. In some embodiments, R' is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms. In some

embodiments, R' is optionally substituted 5-membered heteroaryl having 1 heteroatom. In some embodiments, R' is 5-6 membered heteroaryl having 1-4 heteroatoms. In some embodiments, R' is 5-6 membered heteroaryl having 1 heteroatom. In some embodiments, R' is optionally substituted 9-10 membered heteroaryl having 1-5 heteroatoms. In some embodiments, R' is optionally substituted 9-10 membered heteroaryl having 1 heteroatom. In some embodiments, R' is 9-10 membered heteroaryl having 1-4 heteroatoms. In some embodiments, R' is 9-10 membered heteroaryl having 1 heteroatom. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is sulfur. In some embodiments, L^a is a covalent bond. In some embodiments, L^a is optionally substituted $-(CH_2)n-$ wherein n is 1-10. In some embodiments, L^a is $-(CH_2)n-$. In some embodiments, n is 1. In some embodiments, n is 2. In some embodiments, n is 3. In some embodiments, L^a is $-CH(Ph)-$. In some embodiments, an aromatic amino acid residue is Phe. In some embodiments, an aromatic amino acid residue is Tyr. In some embodiments, an aromatic amino acid residue is Trp. Other aromatic amino acid residues are described herein and can be utilized at various amino acid residue positions.

[0348] In some embodiments, X^3 is a residue of an amino acid suitable for stapling as described herein. In some embodiments, X^3 is $-N(R^{a1})-L^{a1}-C(-L^a-CH=CH_2)(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^3 is $-N(R^{a1})-C(-L^a-CH=CH_2)(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, a methylene unit of L^a is replaced with $-N(R')-$ or $-N(R')C(O)O-$. In some embodiments, R' of $-N(R')-$ or $-N(R')C(O)O-$ and R^{a3} are taken together with their intervening atoms to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atoms. In some embodiments, there are no heteroatoms in addition to the intervening atoms. In some embodiments, there are no heteroatoms in addition to the nitrogen to which R' is attached. In some embodiments, a formed ring is monocyclic. In some embodiments, a formed ring is saturated. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered.

[0349] In some embodiments, X^3 is a residue of an amino acid comprising a double bond, e.g., a terminal olefin, suitable for stapling. In some embodiments, X^3 is a residue of an amino acid having the structure of A-II, A-III, etc. In some embodiments, X^3 is a residue of RdN. In some embodiments, X^3 is a residue of S8. In some embodiments, X^3 is stapled. In some embodiments, X^3 is stapled with X^{10}.

[0350] In some embodiments, X^3 is a residue of an amino acid having the structure of formula A-I, A-II, A-III, etc.

[0351] In some embodiments, X^3 is a residue of an amino acid whose side chain is hydrophobic. In

some embodiments, X^3 is a residue of an amino acid whose side chain is an optionally substituted aliphatic group. In some embodiments, X^3 is a residue of an amino acid whose side chain is optionally substituted C_{1-10} alkyl. In some embodiments, X^3 is a residue of an amino acid whose side chain is C_{1-10} alkyl. In some embodiments, X^3 is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more non-polar and non-charged groups. In some embodiments, X^3 is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more substituents independently selected from halogen, −SR and −OR, where each R is independently C_{1-4} alkyl. In some embodiments, X^3 is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more substituents independently selected from halogen, −SR and −OR, where each R is independently C_{1-4} alkyl. In some embodiments, R is methyl. In some embodiments, X^3 is a residue of Npg, Ala, Ile, Leu, Cha, Abu, hLeu, Val, F3CA, aIle, Nva, TOMe, S(Ome), nLeu, or HF2CA. In some embodiments, X^3 is a residue of an amino acid whose side chain comprises an optionally substituted aromatic group. In some embodiments, X^3 is a residue of an amino acid whose side chain comprises a hydrocarbon aromatic group. In some embodiments, X^3 is a residue of NpG. Phe, 1NapA, or 2NapA.

[0352] In some embodiments, X^3 is a residue of an amino acid whose side chain comprises a polar group, e.g., Gln, Hse, Ser, Asn, [AzAc]Lys, Thr, Asn, Ser, etc.

[0353] In some embodiments, X^3 is a residue of Npg, Ala, Ile, Leu, Cha, Phe, Abu, hLeu, RdN, 1NapA, 2NapA, R8, Val, F3CA, [AzAc]Lys, Gln, aIle, Nva, TOMe, hSe, S(Ome), nLeu, Thr, Asn, Ser, or HF2CA.

[0354] In some embodiments, X^3 is or comprises a residue of an amino acid or a moiety selected from Table A-I, Table A-II, Table A-III and Table A-IV.

[0355] In some embodiments, X^3 is a residue of [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me3AdamantC]-Lys, [Me3AdamantC-PEG2]-Lys, Npa, 1NapA, 2NapA, Abu, aIle, Ala, Asn, Asp, B5, Cha, F3CA, Gln, Glu, HF2CA, hLeu, hSe, Ile, iPrLys, Leu, Lys, nLeu, Npg, Nva, Phe, R8, RdN, S(Ome), Ser, TfeGA, Thr, TOMe, Trp, Tyr, or Val.

[0356] In some embodiments, X^3 is a residue of [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me3AdamantC]-Lys, [Me3AdamantC-PEG2]-Lys, or Npa.

[0357] In some embodiments, X^3 is a residue of 1NapA, 2NapA, Abu, aIle, Ala, Asn, Asp, B5, Cha, F3CA, Gln, Glu, HF2CA, hLeu, hSe, Ile, iPrLys, Leu, Lys, nLeu, Npg, Nva, Phe, R8, RdN, S(Ome), Ser, TfeGA, Thr, TOMe, Trp, Tyr, or Val.

[0358] Various types of amino acid residues can be used for X^4, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^4 is a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof. In some embodiments, X^4 is a residue of an amino acid of formula A-II or salt thereof.

In some embodiments, X^4 is a residue of an amino acid of formula A-III or salt thereof. In some embodiments, X^4 is a residue of an amino acid of formula A-IV or salt thereof. In some embodiments, X^4 is a residue of an amino acid of formula A-V or salt thereof. In some embodiments, X^4 is a residue of an amino acid of formula A-VI or salt thereof. In some embodiments, X^4 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^4 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$ wherein each variable is independently as described herein. In some embodiments, X^4 is $-N(R^{a1})-C(R^{a2})H-C(O)-$ wherein each variable is independently as described herein. In some embodiments, R^{a2} is $-L^a-CH=CH_2$, wherein L^a is as described herein. In some embodiments, R^{a3} is $-L^a-CH=CH_2$, wherein L^a is as described herein. In some embodiments, X^4 is $-N(R^{a1})-L^{a1}-C(-L^a-R^{SP1})(-L^a-R^{SP2})-L^{a2}-C(O)-$ wherein each variable is independently as described herein. In some embodiments, X^4 is $-N(R^{a1})-C(-L^a-R^{SP1})(-L^a-R^{SP2})-C(O)-$ wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0359] In some embodiments, each of R^{SP1} and R^{SP2} is or comprises independently optionally substituted $-CH=CH_2$. In some embodiments, each of R^{SP1} and R^{SP2} is independently $-CH=CH_2$. In some embodiments, each of $-L^a-$ connected R^{SP1} or R^{SP2} is independent L as described herein. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$.

[0360] In some embodiments, X^4 is residue of an amino acid suitable for stapling as described herein. In some embodiments, X^4 is a residue of an amino acid which comprises two functional groups suitable for stapling. In some embodiments, X^4 is a residue of an amino acid which comprises one and only one functional group suitable for stapling. In some embodiments, X^4 is a residue of an amino acid which comprises two olefins, e.g., two terminal olefins. In some embodiments, X^4 is a residue of an amino acid which comprises one and only one double bond for stapling, e.g., a terminal olefin. In some embodiments, X^4 is a residue of an amino acid which has the structure of formula A-I, A-II, A-III, etc.,

wherein both R^{a2} and R^{a3} are independently $-L^a-CH=CH_2$, wherein each L^a is independently as described herein. In some embodiments, X^4 is a residue of an amino acid which has the structure of formula A-I, A-II, A-III, etc., wherein only one of R^{a2} and R^{a3} is $-L^a-CH=CH_2$, wherein each L^a is independently as described herein. In some embodiments, each L^a is independently optionally substituted bivalent C_{1-10} alkylene or heteroalkylene. In some embodiments, each L^a is independently optionally substituted $-(CH_2)n-$ wherein n is 1-10. In some embodiments, n is 1. In some embodiments, n is 2. In some embodiments, n is 3. In some embodiments, n is 4. In some embodiments, n is 5. In some embodiments, n is 6. In some embodiments, n is 7. In some embodiments, n is 8. In some embodiments, n is 9. In some embodiments, n is 10. In some embodiments, X^4 is B5. In some embodiments, X^4 is R8, RdN, R5, RgN, ReN, R7, Az, R6, or R4.

[0361] In some embodiments, X^4 is stapled. In some embodiments, X^4 is connected to two residues independently through two staples (e.g., when X^4 is B5). In some embodiments, X^4 is staple with X^1, and X^4 is stapled with X^{11}.

[0362] As described herein, various staples may be utilized for connecting stapled amino acid residues. In some embodiments, a staple is L^s as described herein. In some embodiments, each staple connected to X^4 is independently L^s as described herein.

[0363] In some embodiments, L^s is $-L^{s1}-L^{s2}-L^{s3}-$, wherein each variable is independently as described herein. In some embodiments, one of L^{s1} and L^{s3} is L^a of one of two stapled amino acid residues, and the other is L^a of the other of two stapled amino acid residues. In some embodiments, L^{s3} is L^a of X^4, e.g., when X^4 is stapled with an amino acid residue to its N-terminus side (e.g., X^1). In some embodiments, L^{s1} is L^a of X^4, e.g., when X^4 is stapled with an amino acid residue to its C-terminus side (e.g., X^{11}). In some embodiments, L^{s1} is L^a of X^1, and L^{s3} is L^a of X^4. In some embodiments, L^{s1} is L^a of X^4, and L^{s3} is L^a of X^{11}. In some embodiments, two staples are bonded to X^4, wherein a first staple staples X^4 with an amino acid residue to the N-terminus side of X^4 (an amino acid residue to a N-terminus side of a reference amino acid residue may be referred to as "N-direction amino acid residue" of the reference amino acid residue, e.g., X^1 is a N-direction amino acid residue of X^4), wherein the first staple is L^s having the structure of $-L^{s1}-L^{s2}-L^{s3}-$, wherein L^{s1} is L^a of the N-direction amino acid residue, and L^{s3} is L^a of X^4, and wherein a second staple staples X^4 with an amino acid residue to the C-terminus side of X^4 (an amino acid residue to a C-terminus side of a reference amino acid residue may be referred to as "C-direction amino acid residue" of the reference amino acid residue, e.g., X^{11} is a C-direction amino acid residue of X^4), wherein the second staple is L^s having the structure of $-L^{s1}-L^{s2}-L^{s3}-$, wherein L^{s3} is L^a of the C-direction amino acid residue, and L^{s1} is L^a of X^4. Various embodiments of L^a are described herein and can be utilized for various amino acid residues including X^4 and N-direction (e.g., X^1) and C-direction (e.g., X^{11}) amino acid residues. For example, in some embodiments, for X^4 each L^a is $-(CH_2)_3-$.

[0364] As described herein, in some embodiments, L^{s2} is optionally substituted −CH=CH−. In some embodiments, L^{s2} is −CH=CH−. In some embodiments, L^{s2} is optionally substituted $-CH_2-CH_2-$. In some embodiments, L^{s2} is $-CH_2-CH_2-$.

[0365] In some embodiments, as described herein, each staple is independently bonded to two alpha carbon atoms of two stapled amino acid residues.

[0366] In some embodiments, X^4 is stapled with two amino acid residues, e.g., X^1 and X^{11}. In some embodiments, X^4 is stapled with only one residue, e.g., X^{11} (e.g., when X^4 is a residue of R5, R4, or R6). In some embodiments, X^4 is $-N(R^{a1})-L^{a1}-C(-L^a-CH=CH_2)(R^{a3})-L^{a2}-C(O)-$ wherein each variable is independently as described herein. In some embodiments, X^4 is $-N(R^{a1})-C(-L^a-CH=CH_2)(R^{a3})-C(O)-$ wherein each variable is independently as described herein. In some embodiments, X^4 is a residue of R4. In some embodiments, X^4 is a residue of R5. In some embodiments, X^4 is a residue of R6.

[0367] In some embodiments, a staple is L^s as described herein. For example, in some embodiments, L^{s1} is L^a of a first amino acid residue of two stapled amino acid residues, e.g., X^4,, and L^{s3} is L^a of a second amino acid residue of two stapled amino acid residues, e.g., X^{11}, wherein a second amino acid residue (e.g., X^{11}) is a C-direction amino acid residue of a first amino acid residue (e.g., X^4).

[0368] In some embodiments, X^4 is stapled. In some embodiments, X^4 is connected to two residues independently through two staples (e.g., when X^4 is B5). In some embodiments, X^4 is stapled with X^1 and X^{11}. In some embodiments, X^4 is stapled with only one residue, e.g., X^{11} (e.g., when X^4 is R8, RdN, R5, RgN, ReN, R7, Az, R6, or R4).

[0369] In some embodiments, X^4 is not stapled (e.g., when other residues are optionally stapled). In some embodiments, X^4 is a residue of an amino acid whose side chain is hydrophobic, comprises an optionally substituted aromatic group, or comprises an acid group (e.g., −COOH, which as those skilled in the art appreciate may exist as a salt form at certain conditions, e.g., certain pH). In some embodiments, X^4 is Ala. is X^4 is Asp.

[0370] In some embodiments, X^4 is selected from B5, R8, RdN, R5, Ala, RgN, ReN, R7, Az, Asp, R6, and R4.

[0371] In some embodiments, X^4 is or comprises a residue of an amino acid or a moiety selected from Table A-I, Table A-II, Table A-III and Table A-IV.

[0372] In some embodiments, X^4 is a residue of B3, B4, B6, Aib, Ala, Asp, Az, B5, Npg, R3, R4, R5, R6, R7, R8, RdN, ReN, RgN, S3, S4, S5, or S6.

[0373] In some embodiments, X^4 is a residue of B3, B4, or B6.

[0374] In some embodiments, X^4 is a residue of Aib, Ala, Asp, Az, B5, Npg, R3, R4, R5, R6, R7, R8, RdN, ReN, RgN, S3, S4, S5, or S6.

[0375] Various types of amino acid residues can be used for X^5, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^5 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^5 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^5 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0376] In some embodiments, X^5 is a residue of an amino acid of formula A-IV or a salt thereof. In some embodiments, X^5 is a residue of an amino acid of formula PA, PA-a, PA-b, PA-c, or a salt thereof. In some embodiments, R^{PA} is $-H$ and R^{PS} and R^{PC} are $-OH$. In some embodiments, X^5 is $-N(R^{a1})-L^{a1}-C(-L^{a}-COOH)(R^{a3})-L^{a2}-C(O)-$ wherein each variable is independently as described herein. In some embodiments, X^5 is $-N(R^{a1})-C(-L^{a}-COOH)(R^{a3})-C(O)-$ wherein each variable is independently as described herein. In some embodiments, L^a is L as described herein. For example, in some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, L is $-CH(CH_3)-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$.

[0377] In some embodiments, X^5 is a residue of amino acid that comprises an acidic or polar group. In some embodiments, X^5 is a residue of amino acid whose side chain comprises an acidic group, e.g., a $-COOH$ group or a salt form thereof (e.g., a compound of formula A-IV, etc.).

[0378] In some embodiments, X^5 is a residue of Asp, Glu, RbGlu, SbGlu, NMeD, and isoDAsp. In some embodiments, X^5 is a residue of Asp, Glu, RbGlu, SbGlu, and isoDAsp. In some embodiments, X^5 is a residue of Asp. In some embodiments, X^5 is a residue of Glu.

[0379] As appreciated by those skilled in the art, at physiological pH (about pH 7.4), an acidic group such as $-COOH$ may exist, in some embodiments, predominantly, as its negatively charged form, e.g., $-COO^-$.

[0380] In some embodiments, X^5 is a residue of amino acid whose side chain comprises a polar group as described herein. In some embodiments, X^5 is a residue of amino acid whose side chain comprises $-OH$. For example, in some embodiments, X^5 is a residue of Hse. In some embodiments, X^5

is a residue of Ser. In some embodiments, X^5 is a residue of amino acid whose side chain comprises an amide group, e.g., $-CONH_2$. For example, in some embodiments, X^5 is a residue of Asn. In some embodiments, X^5 is a residue of Gln.

[0381] In some embodiments, X^5 comprises a side chain which is hydrophobic, is aliphatic, is aromatic, etc.

[0382] In some embodiments, X^5 is a residue of Asp, Hse, Asn, Glu, tetz, 3Thi, hPhe, 2pyrA, Ala, [MeSO2]Dap, [Tf]Dap, Ser, Gln, Leu, Dab, [MeSO2]Dab, nLeu, His, 3pyrA, 4pyrA, [NHiPr]AsnR, [NHEt]AsnR, [NHnPr]AsnR, [NHCyPr]AsnR, [NHCyBu]AsnR, [NHMe]AsnR, Phe, isoAsp, isoDAsp, RbGlu, and SbGlu. In some embodiments, X^5 is selected from Asp, Asn, Gln, Glu, Hse, and Ser.

[0383] In some embodiments, X^5 is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0384] In some embodiments, X^5 is a residue of [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AspSH, bMe2Asp, [MeSO2]Dab, [MeSO2]Dap, [NHCyBu]AsnR, [NHCyPr]AsnR, [NHEt]AsnR, [NHiPr]AsnR, [NHMe]AsnR, [NHnPr]AsnR, [Tf]Dap, 2pyrA, 3pyrA, 3Thi, 4pyrA, Ala, Arg, Asn, Asp, B5, BztA, Dab, Gln, Glu, His, hPhe, Hse, isoAsp, isoDAsp, Leu, nLeu, Npg, RbGlu, SbGlu, Ser, tetz, or Thr.

[0385] In some embodiments, X^5 is a residue of [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AspSH, or bMe2Asp.

[0386] In some embodiments, X^5 is a residue of [MeSO2]Dab, [MeSO2]Dap, [NHCyBu]AsnR, [NHCyPr]AsnR, [NHEt]AsnR, [NHiPr]AsnR, [NHMe]AsnR, [NHnPr]AsnR, [Tf]Dap, 2pyrA, 3pyrA, 3Thi, 4pyrA, Ala, Arg, Asn, Asp, B5, BztA, Dab, Gln, Glu, His, hPhe, Hse, isoAsp, isoDAsp, Leu, nLeu, Npg, RbGlu, SbGlu, Ser, tetz, or Thr.

[0387] Various types of amino acid residues can be used for X^6, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^6 is a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof. In some embodiments, X^6 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^6 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^6 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^6 is a residue of an amino acid of formula A-IV or a salt thereof. In some embodiments, X^6 is a residue of an amino acid of formula PA, PA-a, PA-b, PA-c, or a salt thereof. In some embodiments, R^{PA} is $-H$ and R^{PS} and R^{PC} are $-OH$. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0388] In some embodiments, X^6 is a residue of amino acid that comprises an acidic or polar group

as described herein. In some embodiments, X^6 is a residue of amino acid whose side chain comprises an acidic group, e.g., a −COOH group or a salt form thereof (e.g., a compound of formula A-IV, etc.) as described herein.

[0389] In some embodiments, X^6 is a residue of an amino acid having the structure of formula A-IV or a salt thereof. In some embodiments, X^6 is a residue of amino acid having the structure of formula PA, PA-a, PA-b, PA-c, etc. In some embodiments, R^{PA} is −H and R^{PS} and R^{PC} are −OH. In some embodiments, X^6 is $-N(R^{a1})-L^{a1}-C(-L^{a}-COOH)(R^{a3})-L^{a2}-C(O)-$. In some embodiments, X^6 is $-NH-L^{a1}-C(-L^{a}-COOH)(R^{a3})-L^{a2}-C(O)-$. In some embodiments, X^6 is $-NH-CH(-L^{a}-COOH)-C(O)-$.

[0390] As described herein, L^a is L as described herein. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with −C(O)−, −N(R')−, −Cy− or −O−. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with −C(O)−, −N(R')−, −Cy− or −O−. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$ wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, a methylene unit is replaced with −Cy−. In some embodiments, L is $-CH_2-Cy-CH_2-$. In some embodiments, L is $-CH_2-Cy-$. In some embodiments, L is $-(CH_2)_4-Cy-CH_2-C(CH_3)_2-$. In some embodiments, −Cy− is optionally substituted phenylene. In some embodiments, −Cy− is phenylene. In some embodiments, −Cy− is substituted phenylene. In some embodiments, −Cy− is mono-substituted phenylene. In some embodiments, a substituent is −F. In some embodiments, a substituent is optionally substituted C_{1-6} alkyl. In some embodiments, a substituent is $-CF_3$. In some embodiments, a substituent is −OH. In some embodiments, phenylene is 1,2-phenylene. In some embodiments, phenylene is 1,3-phenylene. In some embodiments, phenylene is 1,4-phenylene. In some embodiments, a substituent is ortho to the carbon atom closed to −COOH. In some embodiments, it is meta. In some embodiments, it is para. In some embodiments, −Cy− is 1,3-phenylene (e.g., in 3COOHF). In some embodiments, −Cy− is an optionally substituted bivalent 5-10 membered heteroaryl group having 1-5 heteroatoms. In some embodiments, −Cy− is an optionally substituted bivalent 5-membered heteroaryl group having 1-4 heteroatoms. In some embodiments, −Cy− is an optionally substituted bivalent 6-membered heteroaryl group having 1-4 heteroatoms. In some embodiments, L is bonded to a backbone atom, e.g., an alpha

carbon atom, at $-CH_2-$. In some embodiments, a methylene unit is replaced with $-N(R')-$ wherein R' is as described herein. In some embodiments, L is $-CH_2-N(R')-CH_2-$ wherein R' is as described herein. In some embodiments, R' is R as described herein. In some embodiments, R is optionally substituted C_{1-6} alkyl. In some embodiments, R is $-CH_2CF_3$.

[0391] In some embodiments, X^6 is a residue of an amino acid of formula PA, PA-a, PA-b, PA-c, or a salt thereof, wherein R^{PA} is $-H$ and R^{PS} and R^{PC} are $-OH$.

[0392] In some embodiments, X^6 is a residue of TfeGA, 2COOHF, 3COOHF, Asp, Glu, RbGlu, SbGlu, NMeD, and isoDAsp. In some embodiments, X^6 is a residue of TfeGA, 2COOHF, 3COOHF, Asp, Glu, RbGlu, SbGlu, and isoDAsp. In some embodiments, X^6 is a residue of TfeGA. In some embodiments, X^6 is a residue of 2COOHF. In some embodiments, X^6 is a residue of 3COOHF. In some embodiments, X^6 is a residue of Asp. In some embodiments, X^6 is a residue of Glu. In some embodiments, X^6 is a residue of EtGA. In some embodiments, X^6 is a residue of 4COOHF. In some embodiments, X^6 is a residue of Aad. In some embodiments, X^6 is a residue of DGlu. In some embodiments, X^6 is a residue of [iPr]GA. In some embodiments, X^6 is a residue of [Pfbn]GA. In some embodiments, X^6 is a residue of [Tfb]GA. In some embodiments, X^6 is a residue of [Bn]GA. In some embodiments, X^6 is a residue of 1AcAw.

[0393] In some embodiments, X^6 is a residue of amino acid whose side chain comprises a polar group as described herein. In some embodiments, X^6 is a residue of amino acid whose side chain comprises $-OH$. For example, in some embodiments, X^6 is a residue of Hse. In some embodiments, X^6 is a residue of Ser. In some embodiments, X^6 is a residue of Thr. In some embodiments, X^6 is a residue of amino acid whose side chain comprises an amide group, e.g., $-CONH_2$. For example, in some embodiments, X^6 is a residue of Asn. In some embodiments, X^6 is a residue of Gln. In some embodiments, X^6 is a residue of Cit.

[0394] In some embodiments, X^6 is a hydrophobic amino acid residue as described herein. In some embodiments, X^6 comprises a side chain which is hydrophobic, is aliphatic, comprises an optionally substituted aromatic group, comprises a basic group, etc.

[0395] As those skilled in the art reading the present disclosure will readily appreciate, amino acid residues of certain properties, structures, etc. described for one position may also be utilized at other positions where amino acid residues of the same properties, structures, etc. can be utilized. For example, when hydrophobic amino acid residues can be utilized at both positions X^3 and X^6, hydrophobic amino acid residues described for X^3 can be utilized for X^6 and vice versa. Similarly, when acidic amino acid residues can be utilized at positions X^2, X^5 and X^6, acidic amino acid residues described for one of them may be utilized at the other two positions as well.

[0396] In some embodiments, X^6 comprises a side chain comprising an optionally substituted

aromatic group as described herein.

[0397] In some embodiments, X^6 is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0398] In some embodiments, X^6 is a residue of Asp, Glu, TfeGA, Thr, EtGA, Asn, 3COOHF, HIs, Gln, 2NapA, 4COOHF, nLeu, Leu, Cit, Aad, Cha, hLeu, hPhe, Ala, 3PyrA, Bip, Tyr, aMeDF, Phe, 1NapA, DaMeL, 3F3MeF, 4F3MeF, tetz, Arg, 2COOHF, DGlu, BztA, Trp, 6F1NapA, 3FF, 4FF, 34FF, 2PyrA, 4PyrA, hTyr, Qui, DipA, 4AmPhe, 2Thi, 1meH, [iPr]GA, [Pfbn]GA, [Tfb]GA, [Bn]GA, Lys, [Tfp]Dap, 1AcAW, Ser, Val, and [MeSO2]Dap.

[0399] In some embodiments, X^6 is a residue of [2COOH4NH2Ph]Dap, [2COOH4NO2Ph]Cys, [2COOH4NO2Ph]Dap, [2COOHPh]TriAzDab, [2COOHPh]TriAzDap, [2Nic]Dap, [3COOH4NO2Ph]Dap, [4AcMePip]GA, [4AcMePip]GAbu, [4CF3PhAc]GA, [4CF3PhAc]GAbu, [Ac]GA, [Ac]GAbu, [Bn]GAbu, [CCpCO2H]TriAzDap, [CF3CO]GA, [CH2CChCO2H]TriAzDap, [CH2CCpCO2H]TriAzDap, [CH2CH2CO2H]TriAzDab, [CH2CH2CO2H]TriAzDap, [CH2CMe2CO2H]TriAzDab, [CH2CMe2CO2H]TriAzDap, [CH2CO2H]GAbu, [CH2CO2H]TriAzDab, [CH2CO2H]TriAzDap, [CMe2CO2H]TriAzDab, [CMe2CO2H]TriAzDap, [Et]AspE, [Et]GA, [Et]GAbu, [Et]GluE, [EtSSEt]AspE, [EtSSEt]GluE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSPh]GluE, [EtSSpy]GluE, [Me]AspE, [Me]GA, [Me]GluE, [MeMorphBz]GA, [MeMorphBz]GAbu, [MePipAc]GA, [MePipAc]GAbu, [MorphAc]GA, [MorphAc]GAbu, [MorphEt]GAbu, [NdiMeButC]GA, [NdiMeButC]GAbu, [Pfb]GA, [Pfbn]GAbu, [PfBz]GA, [PfBz]GAbu, [PfPhAc]GA, [PfPhAc]GAbu, [Pic]GA, [Pic]GAbu, [sBu]GA, [Tfb]GAbu, [Tfp]GA, [Tfp]GAbu, 3TzF, 4F3COOHF, 4TzF, 5F3Me3COOHF, 5iPr3COOHF, AspSH, GAbu, GluSH, R2COOPipA, R3COOPipA, S2COOPipA, S3COOPipA, [Bn]GA, [iPr]GA, [Me2NPr]GA, [Me2NPr]GAbu, [MeSO2]Dap, [Pfbn]GA, [Tfb]GA, [Tfp]Dap, 1AcAW, 1meH, 1NapA, 2COOHF, 2NapA, 2PyrA, 2Thi, 34FF, 3cbmf, 3COOHF, 3F3MeF, 3FF, 3PyrA, 3thi, 4AmPhe, 4COOHF, 4F3MeF, 4FF, 4PyrA, 6F1NapA, Aad, Ala, aMeDF, Arg, Asn, Asp, B5, Bip, BztA, Cha, Cit, DaMeL, DGlu, DipA, EtGA, GA, Gln, Glu, His, hLeu, hPhe, Hse, hTyr, Leu, Lys, nLeu, Npg, Pff, Phe, Qui, Ser, tetz, TfeGA, Thr, Trp, Tyr, or Val.

[0400] In some embodiments, X^6 is a residue of [2COOH4NH2Ph]Dap, [2COOH4NO2Ph]Cys, [2COOH4NO2Ph]Dap, [2COOHPh]TriAzDab, [2COOHPh]TriAzDap, [2Nic]Dap, [3COOH4NO2Ph]Dap, [4AcMePip]GA, [4AcMePip]GAbu, [4CF3PhAc]GA, [4CF3PhAc]GAbu, [Ac]GA, [Ac]GAbu, [Bn]GAbu, [CCpCO2H]TriAzDap, [CF3CO]GA, [CH2CChCO2H]TriAzDap, [CH2CCpCO2H]TriAzDap, [CH2CH2CO2H]TriAzDab, [CH2CH2CO2H]TriAzDap, [CH2CMe2CO2H]TriAzDab, [CH2CMe2CO2H]TriAzDap, [CH2CO2H]GAbu, [CH2CO2H]TriAzDab, [CH2CO2H]TriAzDap, [CMe2CO2H]TriAzDab, [CMe2CO2H]TriAzDap, [Et]AspE, [Et]GA, [Et]GAbu, [Et]GluE, [EtSSEt]AspE, [EtSSEt]GluE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSPh]GluE, [EtSSpy]GluE,

[Me]AspE, [Me]GA, [Me]GluE, [MeMorphBz]GA, [MeMorphBz]GAbu, [MePipAc]GA, [MePipAc]GAbu, [MorphAc]GA, [MorphAc]GAbu, [MorphEt]GAbu, [NdiMeButC]GA, [NdiMeButC]GAbu, [Pfb]GA, [Pfbn]GAbu, [PfBz]GA, [PfBz]GAbu, [PfPhAc]GA, [PfPhAc]GAbu, [Pic]GA, [Pic]GAbu, [sBu]GA, [Tfb]GAbu, [Tfp]GA, [Tfp]GAbu, 3TzF, 4F3COOHF, 4TzF, 5F3Me3COOHF, 5iPr3COOHF, AspSH, GAbu, GluSH, R2COOPipA, R3COOPipA, S2COOPipA, or S3COOPipA.

[0401] In some embodiments, X^6 is a residue of [Bn]GA, [iPr]GA, [Me2NPr]GA, [Me2NPr]GAbu, [MeSO2]Dap, [Pfbn]GA, [Tfb]GA, [Tfp]Dap, 1AcAW, 1meH, 1NapA, 2COOHF, 2NapA, 2PyrA, 2Thi, 34FF, 3cbmf, 3COOHF, 3F3MeF, 3FF, 3PyrA, 3thi, 4AmPhe, 4COOHF, 4F3MeF, 4FF, 4PyrA, 6F1NapA, Aad, Ala, aMeDF, Arg, Asn, Asp, B5, Bip, BztA, Cha, Cit, DaMeL, DGlu, DipA, EtGA, GA, Gln, Glu, His, hLeu, hPhe, Hse, hTyr, Leu, Lys, nLeu, Npg, Pff, Phe, Qui, Ser, tetz, TfeGA, Thr, Trp, Tyr, or Val.

[0402] Various types of amino acid residues can be used for X^7, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^7 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^7 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^7 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0403] In some embodiments, R^{a2} is R, wherein R is C_{1-10} aliphatic. In some embodiments, R^{a3} is R, wherein R is C_{1-10} aliphatic. In some embodiments, each of R^{a2} and R^{a3} is independently R as described herein. In some embodiments, R^{a2} and R^{a3} are the same. In some embodiments, R is C_{1-10} alkyl. In some embodiments, R is methyl.

[0404] In some embodiments, X^7 is a residue of an amino acid whose side chain is hydrophobic. In some embodiments, X^7 is a hydrophobic amino acid residue described herein, e.g., those described for X^3. In some embodiments, X^7 is a residue of an amino acid whose side chain is optionally substituted C_{1-10} alkyl. In some embodiments, X^7 is a residue of an amino acid whose side chain is C_{1-10} alkyl. In some embodiments, X^7 is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more non-polar and non-charged groups. In some embodiments, X^7 comprises a side chain comprising a cycloaliphatic group (e.g., a 3-, 4-, 5-, or 6-membered cycloalkyl group).

[0405] Various types of amino acid residues can be utilized for X^7. In some embodiments, X^7 comprises a polar side chain. In some embodiments, X^7 comprises a non-polar side chain. In some embodiments, X^7 comprises a hydrophobic side chain. In some embodiments, X^7 comprises an aliphatic side chain. In some embodiments, X^7 comprises an alkyl side chain. In some embodiments, X^7

comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^7 comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, X^7 comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, X^7 comprises a detectable moiety such as a fluorescent moiety.

[0406] In some embodiments, X^7 is a residue of amino acid whose side chain comprises a polar group. Various polar amino acid residues described herein may be utilized for X^7. In some embodiments, X^7 is a residue of amino acid whose side chain comprises −OH. For example, in some embodiments, X^7 is a residue of Ser. In some embodiments, X^7 is a residue of amino acid whose side chain comprises a basic group. In some embodiments, X^7 is a residue of amino acid whose side chain comprises an amino group, e.g., Lys. In some embodiments, X^7 comprises a side chain comprising an optionally substituted aromatic group, e.g., Phe.

[0407] In some embodiments, X^7 is selected from Ala, Leu, iPrLys, Phe, Ser, Aib, Gln, nLeu, Trp, Ile, and Lys, and a substituted or labeled lysine. In some embodiments, X^7 is selected from Ala, Leu, iPrLys, [AzAc]Lys, Phe, Ser, [FAM6Ppg][p1TB]Lys, Aib, Gln, nLeu, Trp, [FAM6Ppg][1TriAc]Lys, Ile, and Lys. In some embodiments, a lysine is labeled with a detectable moiety (either directly or indirectly detectable). In some embodiments, X^7 is selected from Ala, Leu, iPrLys, Phe, Ser, Aib, Gln, nLeu, Trp, Ile, and Lys. In some embodiments, X^7 is Ala.

[0408] In some embodiments, X^7 is or comprises a residue of an amino acid or a moiety of Table A-IV.

[0409] In some embodiments, X^7 is a residue of [2OxoPpz]GlnR, [3Py]4SF, [4Pippip]GlnR, [Ac]Lys, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [CF3CO]Lys, [CH2NMe2]4SEF, [EtSO2Ppz]GlnR, [isoindoline]GlnR, [Me2diaminobutane]GlnR, [Me2Npr]Lys, [Me2NPrPip]GlnR, [MeSO2]Lys, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Phc]Lys, [TfePpz]GlnR, Cpg, CyLeu, F2PipNva, hhLeu, Me2Asn, Me2Gln, MeGln, MePpzAsn, Met2O, MorphAsn, MorphNva, [MorphAc]Lys, [mPEG4]Lys, 3COOHF, Aib, Ala, Asn, Asp, Gln, Gly, His, Hse, Ile, iPrLys, Leu, Lys, nLeu, Phe, R5, Ser, Thr, or Trp.

[0410] In some embodiments, X^7 is a residue of [2OxoPpz]GlnR, [3Py]4SF, [4Pippip]GlnR, [Ac]Lys, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [CF3CO]Lys, [CH2NMe2]4SEF, [EtSO2Ppz]GlnR, [isoindoline]GlnR, [Me2diaminobutane]GlnR, [Me2Npr]Lys, [Me2NPrPip]GlnR, [MeSO2]Lys, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Phc]Lys, [TfePpz]GlnR, Cpg, CyLeu, F2PipNva, hhLeu, Me2Asn, Me2Gln, MeGln, MePpzAsn, Met2O, MorphAsn, or MorphNva.

[0411] In some embodiments, X^7 is a residue of [MorphAc]Lys, [mPEG4]Lys, 3COOHF, Aib, Ala, Asn, Asp, Gln, Gly, His, Hse, Ile, iPrLys, Leu, Lys, nLeu, Phe, R5, Ser, Thr, or Trp.

[0412] Various types of amino acid residues can be used for X^8, e.g., a residue of an amino acid of

formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^8 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^8 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^8 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0413] In some embodiments, X^8 comprises a polar side chain as described herein. In some embodiments, X^8 comprises a non-polar side chain. In some embodiments, X^8 comprises a hydrophobic side chain. In some embodiments, X^8 is a hydrophobic amino acid residue as described herein, e.g., those described for X^3. In some embodiments, X^8 comprises an aliphatic side chain. In some embodiments, X^8 comprises an alkyl side chain. In some embodiments, X^8 comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^8 comprises a side chain comprising an acidic group, e.g., $-COOH$, as described herein. In some embodiments, X^8 comprises a side chain comprising a basic group, e.g., $-N(R)_2$ as described herein. In some embodiments, X^8 comprises a detectable moiety such as a fluorescent moiety.

[0414] In some embodiments, X^8 is selected from Ala, Leu, Phe, Ser, Aib, Asp, Glu, Aad, Trp, nLeu, , Gln, , Ile, Lys, iPrLys, and a substituted or labeled lysine. In some embodiments, a lysine is labeled with a detectable moiety (either directly or indirectly detectable). In some embodiments, X^8 is selected from Ala, Leu, Phe, Ser, Aib, Asp, Glu, Aad, Trp, nLeu, [mPEG2]Lys, [AzAc]Lys, Gln, [FAM6Ppg][1TriAc]Lys, [35CF3PhPr]Lys, [1NapPr]Lys, [22PhPr]Lys, [MorphAc]Lys, [MePipAc]Lys, [MeBipipAc]Lys, [4MePipBz]Lys, [MeMorphBz]Lys, [Me2NCBz]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Bua]Lys, [Oct]Lys, [AdamantC]Lys, [Me3AdamantC]Lys, [AdamantPro]Lys, Ile, Lys, and iPrLys. In some embodiments, X^8 is Ala.

[0415] In some embodiments, X^8 is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0416] In some embodiments, X^8 is a residue of [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, F2PipAbu, F2PipNva, MePpzAbu, MePpzAsn, MePpzNva, MorphAbu, MorphAsn, MorphNva, dAla, [1NapPr]Lys, [22PhPr]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [AdamantPro]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, 3COOHF, Aad, Aib, Ala, Asp, Gln, Glu, Gly, Ile, iPrLys, Leu, Lys, nLeu, Phe, Ser, or Trp.

[0417] In some embodiments, X^8 is a residue of [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, F2PipAbu, F2PipNva, MePpzAbu, MePpzAsn,

MePpzNva, MorphAbu, MorphAsn, MorphNva, or dAla.

[0418] In some embodiments, X^8 is a residue of [1NapPr]Lys, [22PhPr]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [AdamantPro]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, 3COOHF, Aad, Aib, Ala, Asp, Gln, Glu, Gly, Ile, iPrLys, Leu, Lys, nLeu, Phe, Ser, or Trp.

[0419] Various types of amino acid residues can be used for X^9, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^9 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^9 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^9 is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0420] In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group. In some embodiments, X^9 is an aromatic amino acid residue as described herein. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 heteroatoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 nitrogen atoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one sulfur atom. In some embodiments, an aromatic group is optionally substituted phenyl. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, $-OR$, $-R$, -C(O)OH, or $-CN$, wherein each R is independently hydrogen or C_{1-4} alkyl or haloalkyl. In some embodiments, an aromatic group is phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 1-5 heteroatoms. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently halogen. In some embodiments, X^9 comprises a side chain which is or comprises two optionally substituted aromatic groups. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen or $-OH$. In some embodiments, an aromatic group is phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 0-5 heteroatoms. In some embodiments, an aromatic group is optionally substituted 9-10 membered bicyclic aryl or heteroaryl having one heteroatom. In some embodiments, X^9 is a residue of an amino acid of formula A-I or a salt thereof. In some embodiments, an amino acid residue has the structure of $-NH-C(R^{a2})(R^{a3})-C(O)-$ or a salt thereof.

In some embodiments, an amino acid residue has the structure of −NH−CH(R^{a3})−C)O)− or a salt thereof. As described herein, R^{a3} is −L^a–R' wherein each variable is independently as described herein. In some embodiments, R' is R as described herein. In some embodiments, R is an optionally substituted group selected from phenyl, 10-membered bicyclic aryl, 5-6 membered heteroaryl having 1-4 heteroatoms, and 9-10 membered bicyclic heteroaryl having 1-5 heteroatoms. In some embodiments, each substituent is independently halogen or −OH or C_{1-6} haloaliphatic. In some embodiments, each substituent is independently halogen or −OH. In some embodiments, R is optionally substituted phenyl. In some embodiments, R is phenyl. In some embodiments, R is optionally substituted aryl. In some embodiments, R is aryl. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1 heteroatom. In some embodiments, optionally substituted R is 6-membered heteroaryl having 1-4 heteroatoms. In some embodiments, optionally substituted R is 6-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 9-membered heteroaryl having 1-5 heteroatoms. In some embodiments, R is optionally substituted 9-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 10-membered heteroaryl having 1-5 heteroatoms. In some embodiments, R is optionally substituted 10-membered heteroaryl having 1 heteroatom. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is sulfur. As described herein, L^a is L. In some embodiments, L is a covalent bond. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted −(CH_2)n−, wherein n is 1-10. In some embodiments, L is −(CH_2)n−, wherein n is 1-10. In some embodiments, L is −CH_2−. In some embodiments, L is −$(CH_2)_2$−. In some embodiments, L is −$(CH_2)_3$−. In some embodiments, L is −$(CH_2)_4$−. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with −C(R')$_2$−, −C(O)−, −N(R')−, −Cy− or −O−. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with −C(R')$_2$−, −C(O)−, −N(R')−, −Cy− or −O−.

[0421] In some embodiments, X^9 is a residue of an amino acid having the structure of formula A-I, wherein R^{a2} is −L^a–R', and R' is an optionally substituted aromatic group. In some embodiments, L^a is optionally substituted CH_2. In some embodiments, L^a is −CH_2−. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, −N(R)$_2$, −C(O)N(R)$_2$, or −CN, wherein

each R is independently −H, C_{1-4} alkyl or haloalkyl, or −Ph. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently C_{1-4} alkyl or haloalkyl. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently C_{1-2} alkyl or haloalkyl. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, NH_2, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more halogen. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from −F, −OR, $-CH_3$, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more −F. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from −F, −OR, $-CH_3$, $-CF_3$, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN. In some embodiments, X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, $-CH_3$, $-CF_3$, or −CN. In some embodiments, X^9 comprises a side chain which is or comprises an aromatic group optionally substituted at 2'-position. In some embodiments, X^9 comprises a side chain which is or comprises an unsubstituted aromatic group. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 heteroatoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 nitrogen atoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one oxygen atom. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one sulfur atom. In some embodiments, an aromatic group is optionally substituted phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 1-5 heteroatoms. In some embodiments, X^9 is selected from Phe, 3F3MeF, 2Thi, 3Thi, 4F3MeF, 3OMeF, 3MeF, 2MeF, 2NapA, 345FF, 34FF, 3FF, His, 2FurA, 2PyrA, 4AmPhe, 4FF, 1meH, 23FF, 2FF, 35FF, 3CBMF, 3ClF, 3meH, 3PyrA, 4CBMF, 4ClF, 4Thz, BztA, hPhe, hTyr, MeTyr, 1NapA, 2CNF, 3CNF, 4CNF, 4MeF, Bip, DipA, and Phg. In some embodiments, X^9 is Phe.

[0422] In some embodiments, X^9 comprises a polar side chain. In some embodiments, X^9 is a polar amino acid residue as described herein. In some embodiments, X^9 comprises a non-polar side chain. In some embodiments, X^9 comprises a hydrophobic side chain. In some embodiments, X^9 is a hydrophobic amino acid residue as described herein. In some embodiments, X^9 comprises an aliphatic side chain. In

some embodiments, X^9 comprises an alkyl side chain. In some embodiments, X^9 comprises a side chain comprising a cycloaliphatic group (e.g., a 5- or 6-membered cycloalkyl group). In some embodiments, X^9 comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^9 comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, X^9 is an acidic amino acid residue as described herein. In some embodiments, X^9 comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, X^9 is a basic amino acid residue as described herein. In some embodiments, X^9 is Gln. In some embodiments, X^9 is Asp. In some embodiments, X^9 is Cha. In some embodiments, X^9 is CypA. In some embodiments, X^9 is Ala. In some embodiments, X^9 is nLeu. In some embodiments, X^9 is Npg.

[0423] In some embodiments, X^9 is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0424] In some embodiments, X^9 is a residue of [3Py]4SF, [CH2NMe2]4SEF, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [MorphCH2]TriAzDap, [SO2MorphCH2]TriAzDap, 2NH2F, 3CH2NMe2F, 3CO2PhF, 3SO2F, 4BrF, Cba, 1meH, 1NapA, 23FF, 2cbmf, 2ClF, 2CNF, 2FF, 2FurA, 2MeF, 2NapA, 2PyrA, 2Thi, 345FF, 34FF, 35FF, 3CBMF, 3ClF, 3CNF, 3COOHF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3Thi, 4AmPhe, 4CBMF, 4ClF, 4CNF, 4F3MeF, 4FF, 4MeF, 4Thz, Ala, Asp, Bip, BztA, Cha, CypA, DipA, Gln, His, hPhe, hTyr, MeTyr, nLeu, Npg, Phe, Phg, Ser, or Tyr.

[0425] In some embodiments, X^9 is a residue of [3Py]4SF, [CH2NMe2]4SEF, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [MorphCH2]TriAzDap, [SO2MorphCH2]TriAzDap, 2NH2F, 3CH2NMe2F, 3CO2PhF, 3SO2F, 4BrF, or Cba.

[0426] In some embodiments, X^9 is a residue of 1meH, 1NapA, 23FF, 2cbmf, 2ClF, 2CNF, 2FF, 2FurA, 2MeF, 2NapA, 2PyrA, 2Thi, 345FF, 34FF, 35FF, 3CBMF, 3ClF, 3CNF, 3COOHF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3Thi, 4AmPhe, 4CBMF, 4ClF, 4CNF, 4F3MeF, 4FF, 4MeF, 4Thz, Ala, Asp, Bip, BztA, Cha, CypA, DipA, Gln, His, hPhe, hTyr, MeTyr, nLeu, Npg, Phe, Phg, Ser, or Tyr.

[0427] Various types of amino acid residues can be used for X^{10}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{10} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{10} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{10} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is −H. In some embodiments, R^{a3} is −H.

[0428] In some embodiments, X^{10} is a residue of an amino acid suitable for stapling as described herein. In some embodiments, X^{10} is a residue of an amino acid comprising a double bond, e.g., a terminal olefin, suitable for stapling. In some embodiments, X^{10} is a residue of an amino acid having the

structure of A-II, A-III, etc. In some embodiments, X^{10} is a residue of RdN. In some embodiments, X^{10} is a residue of S8. In some embodiments, X^{10} is stapled. In some embodiments, X^{10} is stapled with X^3.

[0429] In some embodiments, X^{10} is a residue of an amino acid having the structure of formula A-I, A-II, A-III, etc.

[0430] In some embodiments, X^{10} is a residue of an amino acid whose side chain is hydrophobic. In some embodiments, X^{10} is a residue of an amino acid whose side chain is an optionally substituted aliphatic group. In some embodiments, X^{10} is a residue of an amino acid whose side chain is optionally substituted C_{1-10} alkyl. In some embodiments, X^{10} is a residue of an amino acid whose side chain is C_{1-10} alkyl. In some embodiments, X^{10} is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more non-polar and non-charged groups. In some embodiments, X^{10} is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more substituents independently selected from halogen, −SR and −OR, where each R is independently C_{1-4} alkyl. In some embodiments, X^{10} is a residue of an amino acid whose side chain is C_{1-10} alkyl optionally substituted with one or more substituents independently selected from halogen, −SR and −OR, where each R is independently C_{1-4} alkyl. In some embodiments, R is methyl. In some embodiments, X^{10} is a residue of Npg, Ala, Ile, Leu, Cha, Abu, hLeu, Val, F3CA, aIle, Nva, TOMe, S(Ome), nLeu, or HF2CA. In some embodiments, X^{10} is a residue of an amino acid whose side chain comprises an optionally substituted aromatic group. In some embodiments, X^{10} is a residue of an amino acid whose side chain comprises a hydrocarbon aromatic group. In some embodiments, X^{10} is a residue of NpG. Phe, 1NapA, or 2NapA. In some embodiments, X^{10} is a residue of Leu.

[0431] In some embodiments, X^{10} is a residue of amino acid whose side chain comprises a polar group as described herein. In some embodiments, X^{10} is a residue of amino acid whose side chain comprises −OH. For example, in some embodiments, X^{10} is a residue of Hse. In some embodiments, X^{10} is a residue of Ser. In some embodiments, X^{10} is a residue of Thr. In some embodiments, X^{10} is a residue of amino acid whose side chain comprises an amide group, e.g., $-CONH_2$. For example, in some embodiments, X^{10} is a residue of Asn. In some embodiments, X^{10} is a residue of Gln. In some embodiments, X^{10} is a residue of Cit.

[0432] In some embodiments, X^{10} is a residue of amino acid whose side chain comprises an optionally substituted aromatic group. In some embodiments, X^{10} is an aromatic amino acid residue as described herein. In some embodiments, an aromatic group is optionally substituted phenyl. In some embodiments, X^{10} is Phe.

[0433] In some embodiments, X^{10} is selected from Asn, Val, Gln, Leu, Thr, Ser, Phe, Ala, Hse, Cit, iPrLys, S7, S5, Cha, PyrS, S(Ome), [AzAc]Lys, nLeu, 2F3MeF, 3F3MeF, and 4F3MeF. In some embodiments, X^{10} is a residue of Asn, Val, Gln, Leu, Thr, Ser, Phe, Ala, Hse, Cit, iPrLys, S7, S5, Cha,

PyrS, S(Ome), or [AzAc]Lys. In some embodiments, X^{10} is Leu, Thr or Hse. In some embodiments, X^{10} is Leu. In some embodiments, X^{10} is Thr. In some embodiments, X^{10} is Hse.

[0434] In some embodiments, X^{10} is or comprises a residue of an amino acid or a moiety selected from Table A-I, Table A-II, Table A-III and Table A-IV.

[0435] In some embodiments, X^{10} is a residue of [4MePpzPip]GlnR, [4Pippip]GlnR, [4PyPip]GlnR, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [H4IAP]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [MorphCH2]TriAzDap, [NHBn]GlnR, [Ppz]GlnR, [RDMAPyr]GlnR, [SO2MorphCH2]TriAzDap, [TfePpz]GlnR, 4BrF, AcLys, F2PipNva, Me2Asn, Me2Gln, MePpzAsn, MorphAsn, MorphGln, MorphNva, MeAsn, 2F3MeF, 3F3MeF, 4F3MeF, Abu, Ala, Arg, Asn, Cha, Cit, dSer, Gln, His, hLeu, Hse, iPrLys, Leu, Lys, nLeu, Npg, Phe, PyrS, PyrS2, R5, S(Ome), S5, S7, Ser, Thr, Trp, or Val.

[0436] In some embodiments, X^{10} is a residue of [4MePpzPip]GlnR, [4Pippip]GlnR, [4PyPip]GlnR, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [H4IAP]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [MorphCH2]TriAzDap, [NHBn]GlnR, [Ppz]GlnR, [RDMAPyr]GlnR, [SO2MorphCH2]TriAzDap, [TfePpz]GlnR, 4BrF, AcLys, F2PipNva, Me2Asn, Me2Gln, MePpzAsn, MorphAsn, MorphGln, MorphNva, or MeAsn.

[0437] In some embodiments, X^{10} is a residue of 2F3MeF, 3F3MeF, 4F3MeF, Abu, Ala, Arg, Asn, Cha, Cit, dSer, Gln, His, hLeu, Hse, iPrLys, Leu, Lys, nLeu, Npg, Phe, PyrS, PyrS2, R5, S(Ome), S5, S7, Ser, Thr, Trp, or Val.

[0438] Various types of amino acid residues can be used for X^{11}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{11} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{11} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{11} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0439] In some embodiments, X^{11} is a residue of an amino acid suitable for stapling as described herein. In some embodiments, an amino acid residue suitable for stapling is $-N(R^{a1})-L^{a1}-C(-L^{a}-R^{SP1})(R^{a3})-L^{a2}-C(O)-$ wherein each variable is independently as described herein. In some embodiments, it is $-N(R^{a1})-C(-L^{a}-R^{SP1})(R^{a3})-C(O)-$ wherein each variable is independently as described herein. In some embodiments, in a pair of amino acid residues suitable for stapling, each amino acid residue is independently $-N(R^{a1})-L^{a1}-C(-L^{a}-R^{SP1})(R^{a3})-L^{a2}-C(O)-$ or $-N(R^{a1})-C(-L^{a}-R^{SP1})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$. In some embodiments, both R^{a1} and R^{a3} are $-H$. In some embodiments, R^{SP1} comprises optionally substituted $-CH=CH-$. In some embodiments,

R^{SP1} is or comprises optionally substituted $-CH=CH_2$. In some embodiments, R^{SP1} is $-CH=CH_2$.

[0440] In some embodiments, X^{11} is a residue of an amino acid suitable for stapling. In some embodiments, X^{11} is a residue of an amino acid, e.g., having the structure of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc., whose side chain comprise a functional group suitable for stapling, e.g., a double bond. In some embodiments, X^{11} is a residue of an amino acid that comprises one and no more than one functional groups for stapling. In some embodiments, X^{11} is a residue of an amino acid that comprises one and no more than one double bond for stapling. As in certain embodiments of X^1, in some embodiments, X^{11} comprises a ring structure, and its amino group is part of a ring. In some embodiments, X^{11} is an amino acid as described herein (e.g., of formula A-I, A-II, A-III, etc.), wherein R^{a1} and R^{a3} are taken together to form an optionally substituted ring, e.g., an optionally substituted 3-10 membered ring. In some embodiments, R^{a1} and R^{a3} are taken together with their intervening atoms to form an optionally substituted 3-10 membered saturated or partially saturated ring having, in addition to the intervening atoms, 0-5 heteroatoms.

[0441] In some embodiments, R^{a2} and R^{a3} are taken together to form an optionally substituted ring, e.g., an optionally substituted 3-10 membered ring. In some embodiments, R^{a2} and R^{a3} are taken together with their intervening atoms to form an optionally substituted 3-10 membered saturated or partially saturated ring having, in addition to the intervening atoms, 0-5 heteroatoms.

[0442] As described herein, in some embodiments, a formed ring, e.g., by R^{a1} and R^{a3} taken together with their intervening atoms, by R^{a2} and R^{a3} taken together with their intervening atoms, or by any other two suitable R taken together with their intervening atoms, either in X^{11} or another moiety, is saturated. In some embodiments, a formed ring is monocyclic. In some embodiments, a formed ring has no heteroatoms in addition to the intervening atoms. In some embodiments, a formed ring has at least one heteroatom in addition to the intervening atoms. In some embodiments, a formed ring has at least one nitrogen in addition to the intervening atoms. In some embodiments, L^{a1} and L^{a2} are covalent bond. In some embodiments, a formed ring is unsubstituted. In some embodiments, a formed ring is substituted. In some embodiments, a substitute comprises a double bond which is suitable for metathesis with another double bond to form a staple. In some embodiments, a substituent has the structure of $-C(O)-O-(CH_2)n-Ch=CH_2$, wherein n is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10. In some embodiments, a substituent bonds to a nitrogen ring atom (e.g., see PyrS, PyrsS1, PyrS2, PyrS3, etc.).

[0443] In some embodiments, L^a is $-(CH_2)_{n1}-N(R')-C(O)-(CH_2)_{n2}-$, wherein each variable is independently as described herein, and each $-CH_2-$ is optionally substituted. In some embodiments, L^a is $-(CH_2)_{n1}-N(R')-C(O)-(CH_2)_{n2}-$, wherein each variable is independently as described herein. In some embodiments, $-(CH_2)_{n1}-$ is bonded to X^{11}. In some embodiments, n1 is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10. In some embodiments, n1 is 1. In some embodiments, n1 is 2. In some embodiments, n1 is 3. In some

embodiments, n2 is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10. In some embodiments, n2 is 1. In some embodiments, n2 is 2. In some embodiments, n2 is 3. In some embodiments, n2 is 4. In some embodiments, n2 is 5. In some embodiments, R' of −N(R')− of L^a and R^{a3} are taken together with their intervening atoms to form an optionally substituted ring. In some embodiments, a formed ring is optionally substituted 3-10 membered monocyclic, saturated or partially unsaturated ring having, in addition to the nitrogen atom to which R' is attached, 0-3 heteroatoms. In some embodiments, a formed ring is saturated. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered. In some embodiments, a formed ring is 7-membered. In some embodiments, a formed ring is 8-membered. In some embodiments, a formed ring has no ring heteroatoms other than the nitrogen atom to which R' is attached. In some embodiments, X^{11} is a residue of PyrS2.

[0444] In some embodiments, X^{11} is stapled. In some embodiments, X^{11} is stapled with X^4. In some embodiments, X^{11} is PyrS2 and stapled.

[0445] In some embodiments, a staple, e.g., L^s, has the structure of $-L^{s1}-L^{s2}-L^{s3}$, wherein each variable is independently as described herein. In some embodiments, L^{s1} or L^{s3} is L^a of X^{11} as described herein. In some embodiments, L^{s3} is L^a of X^{11} as described herein. In some embodiments, L^{s1} is L^a of another amino acid residue, e.g., X^4. In some embodiments, L^{s1} is L as described herein. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(R')_2-$, $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(R')_2-$, $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L^{s3} is L as described herein. In some embodiments, L^{s3} is $-(CH_2)_{n1}-N(R')-C(O)-(CH_2)_{n2}-$, wherein each variable is independently as described herein, and each $-CH_2-$ is optionally substituted. In some embodiments, L^{s3} is $-(CH_2)_{n1}-N(R')-C(O)-(CH_2)_{n2}-$, wherein each variable is independently as described herein. In some embodiments, $-(CH_2)_{n1}-$ is bonded to X^{11}. In some embodiments, n1 is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10. In some embodiments, n1 is 1. In some embodiments, n1 is 2. In some embodiments, n1 is 3. In some embodiments, n2 is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10. In some embodiments, n2 is 1. In some embodiments,

n2 is 2. In some embodiments, n2 is 3. In some embodiments, n2 is 4. In some embodiments, n2 is 5. In some embodiments, R' of −N(R')− of L^a and R^{a3} are taken together with their intervening atoms to form an optionally substituted ring. In some embodiments, a formed ring is optionally substituted 3-10 membered monocyclic, saturated or partially unsaturated ring having, in addition to the nitrogen atom to which R' is attached, 0-3 heteroatoms. In some embodiments, a formed ring is saturated. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered. In some embodiments, a formed ring is 7-membered. In some embodiments, a formed ring is 8-membered. In some embodiments, a formed ring has no ring heteroatoms other than the nitrogen atom to which R' is attached.

[0446] In some embodiments, L^{s2} is optionally substituted −CH=CH−. In some embodiments, L^{s2} is −CH=CH−. In some embodiments, L^{s2} is optionally substituted $-CH_2-CH_2-$. In some embodiments, L^{s2} is $-CH_2-CH_2-$.

[0447] In some embodiments, X^{11} is or comprises a residue of an amino acid or a moiety selected from Table A-I, Table A-II, Table A-III and Table A-IV.

[0448] In some embodiments, X^{11} is a residue of an amino acid selected from PyrS2, S8, PyrS, S7, PyrS3, SeN, Az, S4, S6, SdN, S10, S5, SgN or PyrS1. In some embodiments, X^{11} is a residue of PyrS2. In some embodiments, X^{11} is a residue of S8. In some embodiments, X^{11} is a residue of PyrS. In some embodiments, X^{11} is a residue of S7. In some embodiments, X^{11} is a residue of PyrS3. In some embodiments, X^{11} is a residue of SeN. In some embodiments, X^{11} is a residue of Az. In some embodiments, X^{11} is a residue of S4. In some embodiments, X^{11} is a residue of S6. In some embodiments, X^{11} is a residue of SdN. In some embodiments, X^{11} is a residue of S10. In some embodiments, X^{11} is a residue of S5. In some embodiments, X^{11} is a residue of SgN. In some embodiments, X^{11} is a residue of PyrS1.

[0449] In some embodiments, X^{11} is stapled. In some embodiments, X^{11} is stapled with X^4.

[0450] In some embodiments, X^{11} is amino acid residue not suitable for stapling, e.g., via olefin metathesis. In some embodiments, X^{11} comprises a polar side chain. In some embodiments, X^{11} comprises a non-polar side chain. In some embodiments, X^{11} comprises a hydrophobic side chain. In some embodiments, X^{11} comprises an aliphatic side chain. In some embodiments, X^{11} comprises an alkyl side chain. In some embodiments, X^{11} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{11} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, X^{11} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, X^{11} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{11} is Ala. In some embodiments, X^{11} is Phe.

[0451] In some embodiments, X^{11} is selected from S8, PyrS2, PyrS, S7, PyrS3, SeN, Ala, Az, Phe, S4, S6, SdN, S10, S5, SgN, and PyrS1.

[0452] In some embodiments, X^{11} is a residue of Az2, Az3, PyrR2, PyrS4, SeNc5, SPip1, SPip2, SPip3, Aib, Ala, Az, Leu, Phe, PyrS, PyrS1, PyrS2, PyrS3, S10, S4, S5, S6, S7, S8, SdN, SeN, or SgN.

[0453] In some embodiments, X^{11} is a residue of Az2, Az3, PyrR2, PyrS4, SeNc5, SPip1, SPip2, or SPip3.

[0454] In some embodiments, X^{11} is a residue of Aib, Ala, Az, Leu, Phe, PyrS, PyrS1, PyrS2, PyrS3, S10, S4, S5, S6, S7, S8, SdN, SeN, or SgN.

[0455] Various types of amino acid residues can be used for X^{12}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{12} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{12} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{12} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0456] In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group. In some embodiments, X^{12} is an aromatic amino acid residue as described herein. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 heteroatoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 nitrogen atoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one oxygen atom. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one sulfur atom. In some embodiments, an aromatic group is optionally substituted 6-membered heteroaryl having 1-3 heteroatoms. In some embodiments, an aromatic group is optionally substituted 6-membered heteroaryl having 1 nitrogen atom. In some embodiments, an aromatic group is optionally substituted phenyl. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, $-OR$, $-R$, $-C(O)OH$, $-C(O)NH_2$, $-CN$, or $-NO_2$, wherein each R is independently C_{1-4} alkyl or haloalkyl. In some embodiments, an aromatic group is phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 1-5 heteroatoms. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently halogen. In some embodiments, X^{12} comprises a side chain which is or comprises two optionally substituted aromatic groups. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently

selected from halogen or −OH. In some embodiments, an aromatic group is phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 0-5 heteroatoms. In some embodiments, an aromatic group is optionally substituted 9-10 membered bicyclic aryl or heteroaryl having one heteroatom. In some embodiments, X^{12} is a residue of an amino acid of formula A-I or a salt thereof. In some embodiments, an amino acid residue has the structure of $-NH-C(R^{a2})(R^{a3})-C(O)-$ or a salt thereof. In some embodiments, an amino acid residue has the structure of $-NH-CH(R^{a3})-C)O)-$ or a salt thereof. As described herein, R^{a3} is $-L^a-R'$ wherein each variable is independently as described herein. In some embodiments, R' is R as described herein. In some embodiments, R is an optionally substituted group selected from phenyl, 10-membered bicyclic aryl, 5-6 membered heteroaryl having 1-4 heteroatoms, and 9-10 membered bicyclic heteroaryl having 1-5 heteroatoms. In some embodiments, each substituent is independently halogen or −OH or C_{1-6} haloaliphatic. In some embodiments, each substituent is independently halogen or −OH. In some embodiments, R is optionally substituted phenyl. In some embodiments, R is phenyl. In some embodiments, R is optionally substituted aryl. In some embodiments, R is aryl. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1 heteroatom. In some embodiments, optionally substituted R is 6-membered heteroaryl having 1-4 heteroatoms. In some embodiments, optionally substituted R is 6-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 9-membered heteroaryl having 1-5 heteroatoms. In some embodiments, R is optionally substituted 9-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 10-membered heteroaryl having 1-5 heteroatoms. In some embodiments, R is optionally substituted 10-membered heteroaryl having 1 heteroatom. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is sulfur. As described herein, L^a is L. In some embodiments, L is a covalent bond. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(R')_2-$, $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with

−C(R')$_2$−, −C(O)−, −N(R')−, −Cy− or −O−.

[0457] In some embodiments, X^{12} is a residue of an amino acid having the structure of formula A-I, wherein R^{a2} is $-L^a-R'$, and R' is an optionally substituted aromatic group. In some embodiments, L^a is optionally substituted CH_2. In some embodiments, L^a is $-CH_2-$. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, −N(R)$_2$, −C(O)N(R)$_2$, or −CN, wherein each R is independently −H, C_{1-4} alkyl or haloalkyl, or −Ph. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, −NH_2, −C(O)NH_2, −Ph, or −CN, wherein each R is independently C_{1-4} alkyl or haloalkyl. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, −NH_2, −C(O)NH_2, −Ph, or −CN, wherein each R is independently C_{1-2} alkyl or haloalkyl. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, NH_2, −C(O)NH_2, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more halogen. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from −F, −OR, −CH_3, −NH_2, −C(O)NH_2, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more −F. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from −F, −OR, −CH_3, −CF_3, −NH_2, −C(O)NH_2, −Ph, or −CN. In some embodiments, X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −CH_3, −CF_3, or −CN. In some embodiments, X^{12} comprises a side chain which is or comprises an aromatic group optionally substituted at 2'-position. In some embodiments, X^{12} comprises a side chain which is or comprises an unsubstituted aromatic group. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 heteroatoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 nitrogen atoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one oxygen atom. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one sulfur atom. In some embodiments, an aromatic group is optionally substituted phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 1-5 heteroatoms. In some embodiments, X^{12} is selected from Phe, 3Thi, 2ClF, 3FF, 2OMeF, 2FF, Pff, 2CBMF, 3ClF, 3F3MeF, 1NapA, 2NapA, 2PyrA, 4CBMF,

4COOHF, 4F3MeF, Tyr, 2BrF, 2F3MeF, 2Thi, 4PyrA, hPhe, Trp, 1meH, 23FF, 2MeF, 34FF, 3OMeF, 3PyrA, 4ClF, 4CNF, His, 2CNF, 2NO2F, 35FF, 3CBMF, 3CNF, 3MeF, 3meH, 4FF, 4MeF, 4Thz, BztA, dPhe, and hTyr. In some embodiments, X^{12} is 3Thi. In some embodiments, X^{12} is Phe. In some embodiments, X^{12} is Phe, wherein the phenyl group is substituted. In some embodiments, X^{12} is Phe, wherein the phenyl group is 2'-substituted. In some embodiments, X^{12} is 1FF. In some embodiments, X^{12} is 2ClF. In some embodiments, X^{12} is 2BrF. In some embodiments, X^{12} is 2F3MeF. In some embodiments, X^{12} is 2MeF. In some embodiments, X^{12} is 2CNF.

[0458] In some embodiments, X^{12} comprises a polar side chain. In some embodiments, X^{12} comprises a non-polar side chain. In some embodiments, X^{12} comprises a hydrophobic side chain. In some embodiments, X^{12} comprises an aliphatic side chain. In some embodiments, X^{12} comprises an alkyl side chain. In some embodiments, X^{12} comprises a side chain comprising a cycloaliphatic group (e.g., a 5- or 6-membered cycloalkyl group). In some embodiments, X^{12} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{12} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, X^{12} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, X^{12} is Gln. In some embodiments, X^{12} is Asn. In some embodiments, X^{12} is Asp. In some embodiments, X^{12} is Glu. In some embodiments, X^{12} is Cha. In some embodiments, X^{12} is CypA. In some embodiments, X^{12} is Ala. In some embodiments, X^{12} is nLeu. In some embodiments, X^{12} is Npg. In some embodiments, X^{12} is [Acryl]Dap.

[0459] In some embodiments, X^{12} is a polar amino acid residue as described herein. In some embodiments, X^{12} is hydrophobic amino acid residue as described herein. In some embodiments, X^{12} is a hydrophobic amino acid residue as described herein.

[0460] In some embodiments, X^{12} is a residue of amino acid that comprises an acidic or polar group. In some embodiments, X^{12} is a residue of amino acid whose side chain comprises an acidic group, e.g., a −COOH group or a salt form thereof (e.g., a compound of formula A-IV, etc.). Various acidic amino acid residues described herein may be utilized for X^{12}, e.g., those described for X^2, X^5, X^6, etc. In some embodiments, X^{12} is 2COOHF. In some embodiments, X^{12} is a residue of amino acid whose side chain comprises a polar group. In some embodiments, X^{12} is a residue of amino acid whose side chain comprises an amide group, e.g., $-C(O)N(R')_2$ such as $-CONH_2$. For example, in some embodiments, X^{12} is a residue of 2cbmF. Various other polar amino acid residues described herein may also be utilized for X^{12}.

[0461] In some embodiments, X^{12} is selected from Phe, 3Thi, 2ClF, 3FF, 2OMeF, 2FF, Pff, Asp, 2CBMF, 3ClF, 3F3MeF, 1NapA, 2NapA, 2PyrA, 4CBMF, 4COOHF, 4F3MeF, Tyr, 2BrF, 2F3MeF, 2Thi, 4PyrA, Cha, CypA, hPhe, Trp, dPhe, [Acryl]Dap, 1meH, 23FF, 2MeF, 34FF, 3OMeF, 3PyrA, 4ClF, 4CNF, Ala, Glu, His, 2CNF, 2NO2F, 35FF, 3CBMF, 3CNF, 3MeF, 3meH, 4FF, 4MeF, 4Thz, Asn,

BztA, dPhe and hTyr.

[0462] In some embodiments, X^{12} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0463] In some embodiments, X^{12} is a residue of [CyPr]-3SF, [Ph]3SF, [Ph]-3SF, 3BrF, 3CBMF, Cba, [Acryl]Dap, 1meH, 1NapA, 23FF, 2BrF, 2CBMF, 2ClF, 2CNF, 2F3MeF, 2FF, 2MeF, 2NapA, 2NO2F, 2OMeF, 2pyrA, 2Thi, 34FF, 35FF, 3ClF, 3CNF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3thi, 4CBMF, 4ClF, 4CNF, 4COOHF, 4F3MeF, 4FF, 4MeF, 4PyrA, 4Thz, Ala, Asn, Asp, BztA, Cha, CypA, dPhe, Gln, Glu, His, hPhe, hTyr, Leu, Npg, Pff, Phe, PyrS2, Trp, or Tyr.

[0464] In some embodiments, X^{12} is a residue of [CyPr]-3SF, [Ph]3SF, [Ph]-3SF, 3BrF, 3CBMF, or Cba.

[0465] In some embodiments, X^{12} is a residue of [Acryl]Dap, 1meH, 1NapA, 23FF, 2BrF, 2CBMF, 2ClF, 2CNF, 2F3MeF, 2FF, 2MeF, 2NapA, 2NO2F, 2OMeF, 2pyrA, 2Thi, 34FF, 35FF, 3ClF, 3CNF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3thi, 4CBMF, 4ClF, 4CNF, 4COOHF, 4F3MeF, 4FF, 4MeF, 4PyrA, 4Thz, Ala, Asn, Asp, BztA, Cha, CypA, dPhe, Gln, Glu, His, hPhe, hTyr, Leu, Npg, Pff, Phe, PyrS2, Trp, or Tyr.

[0466] Various types of amino acid residues can be used for X^{13}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{13} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{13} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{13} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0467] Various types of amino acid residues can be used for X^{13}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{13} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{13} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{13} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0468] In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group. In some embodiments, X^{13} is an aromatic amino acid residue as described herein.

[0469] In some embodiments, X^{13} is a residue of an amino acid having the structure of formula A-I, wherein R^{a2} is $-L^{a}-R'$, and R' is an optionally substituted aromatic group. In some embodiments, an

aromatic group is optionally substituted 5-membered heteroaryl having 1-3 heteroatoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 nitrogen atoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one sulfur atom. In some embodiments, an aromatic group is optionally substituted phenyl. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, −OR, −R, −C(O)OH, or −CN, wherein each R is independently hydrogen or C_{1-4} alkyl or haloalkyl. In some embodiments, an aromatic group is phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 1-5 heteroatoms. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently halogen. In some embodiments, X^{13} comprises a side chain which is or comprises two optionally substituted aromatic groups. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen or −OH. In some embodiments, an aromatic group is phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 0-5 heteroatoms. In some embodiments, an aromatic group is optionally substituted 9-10 membered bicyclic aryl or heteroaryl having one heteroatom. In some embodiments, X^{13} is a residue of an amino acid of formula A-I or a salt thereof. In some embodiments, an amino acid residue has the structure of $-NH-C(R^{a2})(R^{a3})-C(O)-$ or a salt thereof. In some embodiments, an amino acid residue has the structure of $-NH-CH(R^{a3})-C)O)-$ or a salt thereof. As described herein, R^{a3} is $-L^{a}-R'$ wherein each variable is independently as described herein. In some embodiments, R' is R as described herein. In some embodiments, R is an optionally substituted group selected from phenyl, 10-membered bicyclic aryl, 5-6 membered heteroaryl having 1-4 heteroatoms, and 9-10 membered bicyclic heteroaryl having 1-5 heteroatoms. In some embodiments, each substituent is independently halogen or −OH or C_{1-6} haloaliphatic. In some embodiments, each substituent is independently halogen or −OH. In some embodiments, R is optionally substituted phenyl. In some embodiments, R is phenyl. In some embodiments, R is optionally substituted aryl. In some embodiments, R is aryl. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1 heteroatom. In some embodiments, optionally substituted R is 6-membered heteroaryl having 1-4 heteroatoms. In some embodiments, optionally substituted R is 6-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 9-membered heteroaryl having 1-5 heteroatoms. In some embodiments, R is optionally substituted 9-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 10-membered heteroaryl having 1-5

heteroatoms. In some embodiments, R is optionally substituted 10-membered heteroaryl having 1 heteroatom. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is sulfur. As described herein, L^a is L. In some embodiments, L is a covalent bond. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear or branched C_{1-10} hydrocarbon chain. In some embodiments, L is a bivalent linear C_{1-10} hydrocarbon chain. In some embodiments, L is optionally substituted $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-(CH_2)n-$, wherein n is 1-10. In some embodiments, L is $-CH_2-$. In some embodiments, L is $-(CH_2)_2-$. In some embodiments, L is $-(CH_2)_3-$. In some embodiments, L is $-(CH_2)_4-$. In some embodiments, L is an optionally substituted bivalent linear or branched C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(R')_2-$, $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$. In some embodiments, L is an optionally substituted bivalent linear C_{1-10} hydrocarbon chain wherein one or more methylene units of L are independently replaced with $-C(R')_2-$, $-C(O)-$, $-N(R')-$, $-Cy-$ or $-O-$.

[0470] In some embodiments, L^a is optionally substituted CH_2. In some embodiments, L^a is $-CH_2-$. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, $-OR$, $-R$, $-N(R)_2$, $-C(O)N(R)_2$, or $-CN$, wherein each R is independently $-H$, C_{1-4} alkyl or haloalkyl, or $-Ph$. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, $-OR$, $-R$, $-NH_2$, $-C(O)NH_2$, $-Ph$, or $-CN$, wherein each R is independently C_{1-4} alkyl or haloalkyl. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, $-OR$, $-R$, $-NH_2$, $-C(O)NH_2$, $-Ph$, or $-CN$, wherein each R is independently C_{1-2} alkyl or haloalkyl. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from halogen, $-OR$, $-R$, NH_2, $-C(O)NH_2$, $-Ph$, or $-CN$, wherein each R is independently methyl optionally substituted with one or more halogen. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from $-F$, $-OR$, $-CH_3$, $-NH_2$, $-C(O)NH_2$, $-Ph$, or $-CN$, wherein each R is independently methyl optionally substituted with one or more $-F$. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each substituent of the aromatic group is independently selected from $-F$, $-OR$, $-CH_3$, $-CF_3$, $-NH_2$, $-C(O)NH_2$, $-Ph$, or $-CN$. In some embodiments, X^{13} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each

substituent of the aromatic group is independently selected from halogen, $-CH_3$, $-CF_3$, or $-CN$. In some embodiments, X^{13} comprises a side chain which is or comprises an aromatic group optionally substituted at 2'-position. In some embodiments, X^{13} comprises a side chain which is or comprises an unsubstituted aromatic group. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 heteroatoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having 1-3 nitrogen atoms. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one oxygen atom. In some embodiments, an aromatic group is optionally substituted 5-membered heteroaryl having one sulfur atom. In some embodiments, an aromatic group is optionally substituted phenyl. In some embodiments, an aromatic group is optionally substituted 8-10 membered bicyclic aryl or heteroaryl having 1-5 heteroatoms. In some embodiments, an aromatic group is optionally substituted 9-membered bicyclic heteroaryl having 1-5 heteroatoms. In some embodiments, an aromatic group is optionally substituted 10-membered bicyclic heteroaryl having 1-5 heteroatoms. In some embodiments, an aromatic group is optionally substituted 10-membered bicyclic heteroaryl having one heteroatom which is sulfur. In some embodiments, an aromatic group is optionally substituted 10-membered bicyclic heteroaryl having one heteroatom which is oxygen. In some embodiments, an aromatic group is optionally substituted 10-membered bicyclic heteroaryl having one heteroatom which is nitrogen. In some embodiments, an aromatic group is optionally substituted 10-membered bicyclic aryl.

[0471] In some embodiments, X^{13} is selected from BztA, Trp, 2NapA, 1NapA, WCHO, 5CpW, 5FW, aMeW, H2Trp, His, Phe, 23FF, 34FF, 34OMeF, 1MeW, 5CF3W, 5ClW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, Bip, and Qui. In some embodiments, X^{13} is selected from BztA, Trp, 2NapA, 1NapA, WCHO, 5CpW, 5FW, aMeW, H2Trp, 1MeW, 5CF3W, 5ClW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, and Qui. In some embodiments, X^{13} is selected from BztA, Trp, 2NapA, 1NapA, WCHO, 5CpW, 5FW, aMeW, 1MeW, 5CF3W, 5ClW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, and Qui. In some embodiments, X^{13} is BztA. In some embodiments, X^{13} is Trp. In some embodiments, X^{13} is 1NapA. In some embodiments, X^{13} is 2NapA.

[0472] In some embodiments, X^{13} comprises a polar side chain. In some embodiments, X^{13} comprises a non-polar side chain. In some embodiments, X^{13} comprises a hydrophobic side chain. In some embodiments, X^{13} comprises an aliphatic side chain. In some embodiments, X^{13} comprises an alkyl side chain. In some embodiments, X^{13} comprises a side chain comprising a cycloaliphatic group (e.g., a 5- or 6-membered cycloalkyl group). In some embodiments, X^{13} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{13} comprises a side chain comprising an acidic group, e.g., $-COOH$. In some embodiments, X^{13} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, X^{13} is Gln. In some embodiments, X^{13} is Asn. In some

embodiments, X^{13} is Asp. In some embodiments, X^{13} is Glu. In some embodiments, X^{13} is Cha. In some embodiments, X^{13} is CypA. In some embodiments, X^{13} is Ala. In some embodiments, X^{13} is nLeu. In some embodiments, X^{13} is Npg. In some embodiments, X^{13} is [Acryl]Dap.

[0473] In some embodiments, X^{13} is selected from BztA, Trp, 2NapA, 1NapA, WCHO, 5CpW, 5FW, Ala, aMeW, H2Trp, His, Phe, 23FF, 34FF, 34OMeF, 1MeW, 5CF3W, 5ClW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, Bip, and Qui.

[0474] In some embodiments, X^{13} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0475] In some embodiments, X^{13} is a residue of 2F3MeW, 34ClF, 34MeF, 3Br4FF, 3BrF, 4ClBztA, 4ClW, 4FW, 5IndA, 7AzaW, 7ClBztA, 7FBztA, Cba, RbMe2NapA, RbMeBztA, SbMe2NapA, SbMeBztA, 1MeW, 1NapA, 23FF, 2F3MeF, 2NapA, 34FF, 34OMeF, 3ClF, 3Thi, 4ClF, 5CF3W, 5ClW, 5CpW, 5FW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, Ala, aMeW, Bip, BztA, Cha, H2Trp, His, Phe, PyrS2, Qui, Trp, Tyr, or WCHO.

[0476] In some embodiments, X^{13} is a residue of 2F3MeW, 34ClF, 34MeF, 3Br4FF, 3BrF, 4ClBztA, 4ClW, 4FW, 5IndA, 7AzaW, 7ClBztA, 7FBztA, Cba, RbMe2NapA, RbMeBztA, SbMe2NapA, or SbMeBztA.

[0477] In some embodiments, X^{13} is a residue of 1MeW, 1NapA, 23FF, 2F3MeF, 2NapA, 34FF, 34OMeF, 3ClF, 3Thi, 4ClF, 5CF3W, 5ClW, 5CpW, 5FW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, Ala, aMeW, Bip, BztA, Cha, H2Trp, His, Phe, PyrS2, Qui, Trp, Tyr, or WCHO.

[0478] Various types of amino acid residues can be used for X^{14}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{14} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{14} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{14} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0479] In some embodiments, X^{14} comprises a polar side chain. In some embodiments, X^{14} is a polar amino acid residue as described herein. In some embodiments, X^{14} comprises a non-polar side chain. In some embodiments, X^{14} comprises a hydrophobic side chain. In some embodiments, X^{14} is a hydrophobic amino acid residue as described herein. In some embodiments, X^{14} comprises an aliphatic side chain. In some embodiments, X^{14} comprises an alkyl side chain. In some embodiments, X^{14} comprises a side chain comprising a cycloaliphatic group (e.g., a 5- or 6-membered cycloalkyl group). In some embodiments, X^{14} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{14} comprises a side chain comprising an acidic group, e.g., $-COOH$. In some embodiments, X^{14}

comprises a side chain comprising a basic group, e.g., −N(R)$_2$. In some embodiments, X^{14} is Gln.

[0480] In some embodiments, X^{14} is selected from Gln, His, Ser, dThr, Thr, Ala, Hse, Asn, Leu, Aib, Alaol, Throl, Leuol, dAsn, dGln, dHis, Tyr, [AzAc]Lys, 1MeH, 3MeH, 4TriA, dSer, NMeHis, NMeS, Pro, Trp, Val, MorphAla, 2FurA, Abu, Arg, Dab, iPrLys, Phe, Pheol, and Prool.

[0481] In some embodiments, X^{14} is a residue of an amino alcohol, e.g., Throl, Alaol, Leuol, Pheol or Prool. In some embodiments, an amino alcohol has a structure corresponding an amino acid wherein a −COOH group is replaced with a −OH group. In some embodiments, when X^{14} is a residue of an amino alcohol, it is the last residue at the C-terminus. Such a sequence may be properly considered to have −OH as a C-terminus capping group, or such amino alcohol residues may be considered as C-terminus capping groups.

[0482] In some embodiments, X^{15} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0483] In some embodiments, X^{14} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0484] In some embodiments, X^{14} is a residue of [3C]TriAzLys, [4F3CPip]GlnR, [4MePpzPip]GlnR, [4Pippip]GlnR, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Pip]GlnR, [PropynPEG14]Lys, [RDMAPyr]GlnR, [TfePpz]GlnR, AcLys, BnBoroleK, F2PipNva, GlnR, Me2Asn, Me2Gln, MePpzAsn, Met2O, MorphAsn, MorphGln, MorphNva, dAla, MeAsn, 1MeH, 2cbmf, 2F3MeF, 2FurA, 3cbmf, 3MeH, 4TriA, Abu, Aib, Ala, Alaol, Arg, Asn, Asp, BztA, Cha, Dab, dAsn, dGln, dHis, dSer, dThr, Gln, His, Hse, iPrLys, Leu, Leuol, Lys, MorphAla, NMeHis, NMeS, Npg, Phe, Pheol, Pro, Prool, PyrS2, S5, Ser, Thr, Throl, Trp, Tyr, or Val.

[0485] In some embodiments, X^{14} is a residue of [3C]TriAzLys, [4F3CPip]GlnR, [4MePpzPip]GlnR, [4Pippip]GlnR, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Pip]GlnR, [PropynPEG14]Lys, [RDMAPyr]GlnR, [TfePpz]GlnR, AcLys, BnBoroleK, F2PipNva, GlnR, Me2Asn, Me2Gln, MePpzAsn, Met2O, MorphAsn, MorphGln, MorphNva, dAla, or MeAsn.

[0486] In some embodiments, X^{14} is a residue of 1MeH, 2cbmf, 2F3MeF, 2FurA, 3cbmf, 3MeH, 4TriA, Abu, Aib, Ala, Alaol, Arg, Asn, Asp, BztA, Cha, Dab, dAsn, dGln, dHis, dSer, dThr, Gln, His, Hse, iPrLys, Leu, Leuol, Lys, MorphAla, NMeHis, NMeS, Npg, Phe, Pheol, Pro, Prool, PyrS2, S5, Ser, Thr, Throl, Trp, Tyr, or Val.

[0487] In some embodiments, p14 is 1. In some embodiments, p14 is 0.

[0488] Various type of amino acid residues can be utilized for X^{15}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{15} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is

independently as described herein. In some embodiments, X^{15} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{15} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is −H. In some embodiments, R^{a3} is −H.

[0489] In some embodiments, X^{15} comprises a polar side chain as described herein. In some embodiments, X^{15} comprises a non-polar side chain. In some embodiments, X^{15} comprises a hydrophobic side chain as described herein. In some embodiments, X^{15} comprises an aliphatic side chain. In some embodiments, X^{15} comprises an alkyl side chain. In some embodiments, a side chain of X^{15} is C_{1-10} alkyl. In some embodiments, X^{15} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, X^{15} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, X^{15} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, X^{15} comprises a detectable moiety such as a fluorescent moiety.

[0490] In some embodiments, X^{15} is Ala. In some embodiments, X^{15} is dAla. In some embodiments, In some embodiments, X^{15} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{15} is Lys. In some embodiments, X^{15} is substituted or labeled lysine. In some embodiments, X^{15} is selected from [1Napc]Lys, [1NapPr]Lys, [22PhPr]Lys, [2Napc]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [AzAc]Lys, [Bua]Lys, [Me2NCBz]Lys, [Me3AdamantC]Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, [PropynPEG1]Lys, [PropynPEG2]Lys, [PropynPEG3]Lys, [PropynPEG4]Lys, 6AmHex, 6AzHex, Aib, Ala, dAla, dIle, Ile, and Lys.

[0491] In some embodiments, X^{15} is a residue of a compound without a carboxyl group, e.g., 6AmHex, 6AzHex, etc. In some embodiments, when X^{15} is such a residue, it is the last residue at the C-terminus. Such a sequence may be properly considered to have X^{15} as a C-terminus capping group.

[0492] In some embodiments, X^{15} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0493] In some embodiments, X^{15} is a residue of [3C]TriAzdLys, [3C]TriAzLys, [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, [PropynPEG14]Lys, dAla, dIle, [1Napc]Lys, [1NapPr]Lys, [22PhPr]Lys, [2Napc]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, [PropynPEG1]Lys, [PropynPEG2]Lys, [PropynPEG3]Lys, [PropynPEG4]Lys, 6AmHex, Aib, Ala, Alaol, BztA, Gln, Ile, Leuol, Leu, Lys, NEt2, NHBn, NHCyHe, NHCyPr, NHEt, OH, Phe, Pheol, Prool, Throl, or Val.

[0494] In some embodiments, X^{15} is a residue of [3C]TriAzdLys, [3C]TriAzLys, [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, [PropynPEG14]Lys, dAla, or dIle.

[0495] In some embodiments, X^{15} is a residue of [1Napc]Lys, [1NapPr]Lys, [22PhPr]Lys, [2Napc]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, [PropynPEG1]Lys, [PropynPEG2]Lys, [PropynPEG3]Lys, [PropynPEG4]Lys, 6AmHex, Aib, Ala, Alaol, BztA, Gln, Ile, Leuol, Leu, Lys, NEt2, NHBn, NHCyHe, NHCyPr, NHEt, OH, Phe, Pheol, Prool, Throl, or Val.

[0496] In some embodiments, p15 is 1. In some embodiments, p15 is 0.

[0497] Various types of amino acid residues can be used for X^{16}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{16} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{16} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{16} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0498] In some embodiments, X^{16} comprises a polar side chain. In some embodiments, it is a polar amino acid residue as described herein. In some embodiments, X^{16} comprises a non-polar side chain. In some embodiments, X^{16} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{16} comprises an aliphatic side chain. In some embodiments, X^{16} comprises an alkyl side chain. In some embodiments, a side chain of X^{16} is C_{1-10} alkyl. In some embodiments, X^{16} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some embodiments, X^{16} comprises a side chain comprising an acidic group, e.g., $-COOH$. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{16} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{16} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{16} is Ala. In some embodiments, X^{16} is dAla.

[0499] In some embodiments, X^{16} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0500] In some embodiments, X^{16} is a residue of Cbg, Cpg, CyLeu, dLeu, dAla, Aib, Ala, Arg, Asn, dGln, dThr, Gln, Ile, Leu, nLeu, Phe, Ser, Thr, Trp, Tyr, or Val.

[0501] In some embodiments, X^{16} is a residue of Cbg, Cpg, CyLeu, dLeu, or dAla.

[0502] In some embodiments, X^{16} is a residue of Aib, Ala, Arg, Asn, dGln, dThr, Gln, Ile, Leu, nLeu, Phe, Ser, Thr, Trp, Tyr, or Val.

[0503] In some embodiments, p16 is 1. In some embodiments, p16 is 0.

[0504] Various types of amino acid residues can be used for X^{17}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{17} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{17} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{17} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0505] In some embodiments, X^{17} comprises a polar side chain. In some embodiments, it is a polar amino acid residue as described herein. In some embodiments, X^{17} comprises a non-polar side chain. In some embodiments, X^{17} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{17} comprises an aliphatic side chain. In some embodiments, X^{17} comprises an alkyl side chain. In some embodiments, a side chain of X^{17} is C_{1-10} alkyl. In some embodiments, X^{17} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some embodiments, X^{17} comprises a side chain comprising an acidic group, e.g., $-COOH$. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{17} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{17} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{17} is Ala, dAla, or Leu. In some embodiments, X^{17} is Ala. In some embodiments, X^{17} is dAla. In some embodiments, X^{17} is Leu.

[0506] In some embodiments, X^{17} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0507] In some embodiments, p17 is 1. In some embodiments, p17 is 0.

[0508] Various types of amino acid residues can be used for X^{18}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{18} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{18} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{18} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0509] In some embodiments, X^{18} comprises a polar side chain. In some embodiments, it is a polar

amino acid residue as described herein. In some embodiments, X^{18} comprises a non-polar side chain. In some embodiments, X^{18} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{18} comprises an aliphatic side chain. In some embodiments, X^{18} comprises an alkyl side chain. In some embodiments, a side chain of X^{18} is C_{1-10} alkyl. In some embodiments, X^{18} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some embodiments, X^{18} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{18} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{18} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{18} is Aib, Ala, or Leu. In some embodiments, X^{18} is Ala or Leu. In some embodiments, X^{18} is Aib. In some embodiments, X^{18} is Ala. In some embodiments, X^{18} is Leu.

[0510] In some embodiments, X^{18} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0511] In some embodiments, p18 is 1. In some embodiments, p18 is 0.

[0512] Various types of amino acid residues can be used for X^{19}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{19} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{19} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{19} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is −H. In some embodiments, R^{a3} is −H.

[0513] In some embodiments, X^{19} comprises a polar side chain. In some embodiments, it is a polar amino acid residue as described herein. In some embodiments, X^{19} comprises a non-polar side chain. In some embodiments, X^{19} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{19} comprises an aliphatic side chain. In some embodiments, X^{19} comprises an alkyl side chain. In some embodiments, a side chain of X^{19} is C_{1-10} alkyl. In some embodiments, X^{19} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some embodiments, X^{19} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{19} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{19} comprises a detectable moiety such as a

fluorescent moiety. In some embodiments, X^{19} is Aib, Ala, or Leu. In some embodiments, X^{19} is Ala or Leu. In some embodiments, X^{19} is Aib. In some embodiments, X^{19} is Ala. In some embodiments, X^{19} is Leu.

[0514] In some embodiments, X^{19} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0515] In some embodiments, p19 is 1. In some embodiments, p19 is 0.

[0516] Various types of amino acid residues can be used for X^{20}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{20} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{20} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{20} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is $-H$. In some embodiments, R^{a3} is $-H$.

[0517] In some embodiments, X^{20} comprises a polar side chain. In some embodiments, it is a polar amino acid residue as described herein. In some embodiments, X^{20} comprises a non-polar side chain. In some embodiments, X^{20} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{20} comprises an aliphatic side chain. In some embodiments, X^{20} comprises an alkyl side chain. In some embodiments, a side chain of X^{20} is C_{1-10} alkyl. In some embodiments, X^{20} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some embodiments, X^{20} comprises a side chain comprising an acidic group, e.g., $-COOH$. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{20} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{20} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{20} is Aib, Ala, or Leu. In some embodiments, X^{20} is Ala or Leu. In some embodiments, X^{20} is Aib. In some embodiments, X^{20} is Ala. In some embodiments, X^{20} is Leu.

[0518] In some embodiments, X^{20} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0519] In some embodiments, p20 is 1. In some embodiments, p20 is 0.

[0520] Various types of amino acid residues can be used for X^{21}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{21} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{21} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein

each variable is independently as described herein. In some embodiments, X^{21} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is −H. In some embodiments, R^{a3} is −H.

[0521] In some embodiments, X^{21} comprises a polar side chain. In some embodiments, it is a polar amino acid residue as described herein. In some embodiments, X^{21} comprises a non-polar side chain. In some embodiments, X^{21} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{21} comprises an aliphatic side chain. In some embodiments, X^{21} comprises an alkyl side chain. In some embodiments, a side chain of X^{21} is C_{1-10} alkyl. In some embodiments, X^{21} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some embodiments, X^{21} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{21} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{21} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{21} is Aib, Ala, or Leu. In some embodiments, X^{21} is Ala or Leu. In some embodiments, X^{21} is Aib. In some embodiments, X^{21} is Ala. In some embodiments, X^{21} is Leu.

[0522] In some embodiments, X^{21} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0523] In some embodiments, p21 is 1. In some embodiments, p21 is 0.

[0524] Various types of amino acid residues can be used for X^{22}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{22} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{22} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{22} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is −H. In some embodiments, R^{a3} is −H.

[0525] In some embodiments, X^{22} comprises a polar side chain. In some embodiments, it is a polar amino acid residue as described herein. In some embodiments, X^{22} comprises a non-polar side chain. In some embodiments, X^{22} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{22} comprises an aliphatic side chain. In some embodiments, X^{22} comprises an alkyl side chain. In some embodiments, a side chain of X^{22} is C_{1-10} alkyl. In some embodiments, X^{22} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some

embodiments, X^{22} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{22} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{22} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{22} is Aib, Ala, or Leu. In some embodiments, X^{22} is Ala or Leu. In some embodiments, X^{22} is Aib. In some embodiments, X^{22} is Ala. In some embodiments, X^{22} is Leu.

[0526] In some embodiments, X^{22} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0527] In some embodiments, p22 is 1. In some embodiments, p22 is 0.

[0528] Various types of amino acid residues can be used for X^{23}, e.g., a residue of an amino acid of formula A-I, A-II, A-III, A-IV, A-V, A-VI, etc. or a salt thereof in accordance with the present disclosure. In some embodiments, X^{23} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{23} is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$, wherein each variable is independently as described herein. In some embodiments, X^{23} is $-N(R^{a1})-C(R^{a2})H-C(O)-$, wherein each variable is independently as described herein. In some embodiments, R^{a1} is −H. In some embodiments, R^{a3} is −H.

[0529] In some embodiments, X^{23} comprises a polar side chain. In some embodiments, it is a polar amino acid residue as described herein. In some embodiments, X^{23} comprises a non-polar side chain. In some embodiments, X^{23} comprises a hydrophobic side chain. In some embodiments, it is a hydrophobic amino acid residue as described herein. In some embodiments, X^{23} comprises an aliphatic side chain. In some embodiments, X^{23} comprises an alkyl side chain. In some embodiments, a side chain of X^{23} is C_{1-10} alkyl. In some embodiments, X^{23} comprises a side chain comprising an optionally substituted aromatic group. In some embodiments, it is an aromatic amino acid residue as described herein. In some embodiments, X^{23} comprises a side chain comprising an acidic group, e.g., −COOH. In some embodiments, it is an acidic amino acid residue as described herein. In some embodiments, X^{23} comprises a side chain comprising a basic group, e.g., $-N(R)_2$. In some embodiments, it is a basic amino acid residue as described herein. In some embodiments, X^{23} comprises a detectable moiety such as a fluorescent moiety. In some embodiments, X^{23} is Aib, Ala, or Leu. In some embodiments, X^{23} is Ala or Leu. In some embodiments, X^{23} is Aib. In some embodiments, X^{23} is Ala. In some embodiments, X^{23} is Leu.

[0530] In some embodiments, X^{23} is or comprises a residue of an amino acid or a moiety selected from Table A-IV.

[0531] In some embodiments, p23 is 1. In some embodiments, p23 is 0.

[0532] In some embodiments, an agent is or comprises a peptide having the structure of:

R^N–$[X]_p$–$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}$–$[X]_{p'}$–$R^C$, or a salt thereof, wherein:

each X is independently an amino acid residue;

each p and p' is independently 0-10;

R^N is independently a peptide, an amino protecting group or R'–L^{RN}–;

R^C is independently a peptide, a carboxyl protecting group, –L^{RC}–R', –O–L^{RC}–R' or –N(R')–L^{RC}–R';

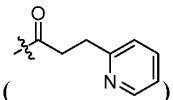
each of L^{RN} and L^{RC} is independently L; and

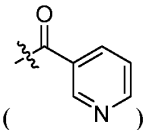
each other variable is independently as described herein.

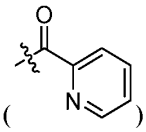
[0533] In some embodiments, p is 0. In some embodiments, p is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10. In some embodiments, p is 1. In some embodiments, p is 2. In some embodiments, p is 3. In some embodiments, p is 4. In some embodiments, p is 5. In some embodiments, p is 6. In some embodiments, p is 7. In some embodiments, p is 8. In some embodiments, p is 9. In some embodiments, p is 10.

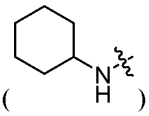
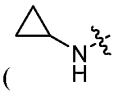
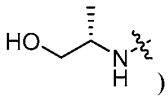
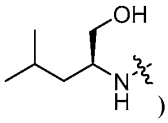
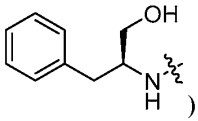
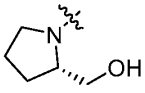
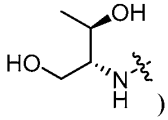
[0534] In some embodiments, p' is 0. In some embodiments, p' is 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10. In some embodiments, p' is 1. In some embodiments, p' is 2. In some embodiments, p' is 3. In some embodiments, p' is 4. In some embodiments, p' is 5. In some embodiments, p' is 6. In some embodiments, p' is 7. In some embodiments, p' is 8. In some embodiments, p' is 9. In some embodiments, p' is 10.

[0535] In some embodiments, each X is independently a residue of an amino acid having the structure of A-I, A-II, A-III, A-IV, etc.

[0536] In some embodiments, R^N is or comprises a peptide. In some embodiments, R^N is a N-terminus capping group. In some embodiments, R^N is an amino protecting group. In some embodiments, R^N is –L^{RN}–R'. In some embodiments, L^{RN} is –C(O)–. In some embodiments, R^N is –C(O)R. In some embodiments, R^N is Ac. In some embodiments, R^N is AzAc (N_3–CH_2–C(O)–). In some embodiments, R^N is 2PyPrpc (). In some embodiments, R^N is MeOPr ($CH_3OCH_2CH_2C(O)$–).

[0537] In some embodiments, R^N is RSO_2 (–SO_2R). In some embodiments, R^N is $MeSO_2$ (–SO_2CH_3). In some embodiments, R^N is mPEG2 ($CH_3OCH_2CH_2OCH_2CH_2C(O)$–). In some embodiments, wherein R^N is Nic (). In some embodiments, R^N is Oct ($CH_3(CH_2)_6C(O)$–). In

some embodiments, R^N is Pic ().

[0538] In some embodiments, R^C is or comprises a peptide. In some embodiments, R^C is a C-terminus capping group. In some embodiments, R^C is a carboxyl protecting group. In some embodiments, R^C is $-L^{RC}-R'$. In some embodiments, R^C is $-O-L^{RC}-R'$. In some embodiments, R^C is $-OR'$. In some embodiments, R^C is $-N(R')-L^{RC}-R'$. In some embodiments, R^C is $-N(R')_2$. In some embodiments, R^C is $-NHR'$. In some embodiments, R^C is $-N(R)_2$. In some embodiments, R^C is $-NHR$. In some embodiments, R^C is $-NH_2$. In some embodiments, R^C is $-NHEt$. In some embodiments, R^C is $-NHBn$. In some embodiments, R^C is $-NHCyHe$ (). In some embodiments, R^C is $-NHCyPr$ (). In some embodiments, R^C is $-NHCyBu$. In some embodiments, R^C is $-6AmHex$, wherein one amino group of $-6AmHex$ is bonded to the last $-C(O)-$ of the peptide backbone (R^C is $-NH-(CH_2)_6-NH_2$). In some embodiments, R^C is $-6AZHex$, wherein the amino group of $-6AzHex$ is bonded to the last $-C(O)-$ of the peptide backbone (R^C is $-NH-(CH_2)_6-N_3$). In some embodiments, R^C is $-Alaol$, wherein the amino group of $-Alaol$ is bonded to the last $-C(O)-$ of the peptide backbone (R^C is ). In some embodiments, R^C is $-Leuol$, wherein the amino group of $-Leuol$ is bonded to the last $-C(O)-$ of the peptide backbone (R^C is ). In some embodiments, R^C is $-Pheol$, wherein the amino group of $-Pheol$ is bonded to the last $-C(O)-$ of the peptide backbone (R^C is ). In some embodiments, R^C is $-Prool$, wherein the amino group of $-Prool$ is bonded to the last $-C(O)-$ of the peptide backbone (R^C is ). In some embodiments, R^C is $-Throl$, wherein the amino group of $-Throl$ is bonded to the last $-C(O)-$ of the peptide backbone (R^C is ). In some embodiments, R^C is $-OH$.

[0539] In some embodiments, an agent that binds to beta-catenin comprises an amino acid residue described herein, e.g., a residue of formula AA or a salt form thereof. In some embodiments, an agent that binds to beta-catenin comprises a TfeGA residue. In some embodiments, an agent that binds to beta-catenin comprises a 2COOHF residue. In some embodiments, an agent that binds to beta-catenin comprises a 3COOHF residue. In some embodiments, such a residue is X^2, X^5 or X^6. In some embodiments, such a residue is X^5. In some embodiments, such a residue is X^6.

[0540] Certain useful agents (e.g., stapled peptides) that bind to beta-catenin and compositions thereof are presented in Table E3 as examples; certain data are presented in Table E2 as examples.

Amino Acids

[0541] As appreciated by those skilled in the art, various amino acids may be utilized in accordance with the present disclosure. For example, both naturally occurring and non-naturally occurring amino acids can be utilized in accordance with the present disclosure. In some embodiments, an amino acid is a compound comprising an amino group that can form an amide group with a carboxyl group and a carboxyl group. In some embodiments, an amino acid is an alpha amino acid. In some embodiments, an amino acid is a beta-amino acid. In some embodiments, an amino acid is a D-amino acid. In some embodiments, an amino acid is a L-amino acid. In some embodiments, an amino acid is an naturally encoded amino acid, e.g., in mammalian cells.

[0542] In some embodiments, an amino acid is a compound having the structure of formula A-I:

$$NH(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-COOH,$$

A-I

or a salt thereof, wherein:

each of R^{a1}, R^{a2}, R^{a3} is independently $-L^a-R'$;

each of L^a, L^{a1} and L^{a2} is independently L;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each $-Cy-$ is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently $-R$, $-C(O)R$, $-CO_2R$, or $-SO_2R$;

each R is independently $-H$, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30}

arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms.

[0543] In some embodiments, a ring moiety of, e.g., −Cy−, R (including those formed by R groups taken together), etc. is monocyclic. In some embodiments, a ring moiety is bicyclic or polycyclic. In some embodiments, a monocyclic ring is an optionally substituted 3-10 (3, 4, 5, 6, 7, 8, 9, or 10, 3-8, 3-7, 4-7, 4-6, 5-6, etc.) membered, saturated, partially unsaturated or aromatic ring having 0-5 heteroatoms. In some embodiments, each monocyclic ring unit of a bicyclic or polycyclic ring moiety is independently an optionally substituted 3-10 (3, 4, 5, 6, 7, 8, 9, or 10, 3-8, 3-7, 4-7, 4-6, 5-6, etc.) membered, saturated, partially unsaturated or aromatic ring having 0-5 heteroatoms.

[0544] In some embodiments, each heteroatom is independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon. In some embodiments, each heteroatom is independently selected from oxygen, nitrogen, and sulfur.

[0545] In some embodiments, L^{a1} is a covalent bond. In some embodiments, a compound of formula A-1 is of the structure $NH(R^{a1})-C(R^{a2})(R^{a3})-L^{a2}-COOH$.

[0546] In some embodiments, L^{a2} is a covalent bond. In some embodiments, a compound of formula A-1 is of the structure $NH(R^{a1})-C(R^{a2})(R^{a3})-L^{a2}-COOH$.

[0547] In some embodiments, L^{a1} is a covalent bond and L^{a2} is a covalent bond. In some embodiments, a compound of formula A-1 is of the structure $NH(R^{a1})-C(R^{a2})(R^{a3})-COOH$.

[0548] In some embodiments, an amino acid is suitable for stapling. In some embodiments, an amino acid comprises a terminal olefin. Certain such amino acids are exemplified herein (e.g., those described in or utilized in peptides of various Tables).

[0549] In some embodiments, an agent comprises a detectable moiety, which can either be detected directly or indirectly. For example, in some embodiments, a detectable moiety is or comprises a fluorescent group. In some embodiments, a detectable moiety is or comprises a biotin moiety. In some embodiments, a detectable moiety is connected to the rest of an agent at an amino acid residue, e.g., through a side chain, optionally through a linker (e.g., L as described herein). In some embodiments, a detectable moiety is $-N_3$, which may be detected after a click chemistry reaction with a labeled agent

comprising an alkyne.

[0550] In some embodiments, the present disclosure provides various compounds, which among other things may be utilized as amino acids for a number of applications, e.g., for preparation of peptides or other useful compounds.

[0551] In some embodiments, a compound (e.g., an amino acid or a protected and/or activated form thereof) or a salt thereof comprises 1) a first group which is an optionally protected amino group, 2) a second group which is an optionally protected and/or activated carboxyl group, and 3) a side chain (typically bonded to an atom between the first and second groups ("a side chain attachment atom")) which comprises an optionally protected and/or activated carboxyl group and a) an optionally substituted ring (which ring is typically between the optionally protected and/or activated carboxyl group of the side chain and a side chain attachment atom) or b) an amino group (which amino group is typically between the optionally protected and/or activated carboxyl group of the side chain and a side chain attachment atom). In some embodiments, a provided compound is an optionally protected and/or activated amino acid or a salt thereof, wherein the side chain of the amino acid comprises an optionally protected and/or activated carboxyl group, and an optionally substituted ring or an amino group, wherein the optionally substituted ring or an amino group is between the optionally protected and/or activated carboxyl group and a backbone atom to which a side chain is attached (e.g., an atom between an amino and carboxyl group, both of which can be optionally and independently protected and/or activated (e.g., an alpha carbon atom in an amino acid)).

[0552] In some embodiments, the present disclosure provides compounds having the structure of formula PA:

$$N(R^{PA})(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)R^{PC},$$

PA

or a salt thereof, wherein:

R^{PA} is −H or an amino protecting group;

each of R^{a1} and R^{a3} is independently $-L^{a}-R'$;

R^{a2} is $-L^{aa}-C(O)R^{PS}$;

each of L^{a}, L^{a1} and L^{a2} is independently L;

$-C(O)R^{PS}$ is optionally protected or activated −COOH;

$-C(O)R^{PC}$ is optionally protected or activated −COOH;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$,

−$S(O)_2N(R')$−, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −R, −C(O)R, $-CO_2R$, or $-SO_2R$; and

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms.

[0553] In some embodiments, compounds (e.g., amino acids, such as those of formula A-I or protected/activated forms thereof) having the structure of formula PA:

$$N(R^{PA})(R^{a1})–L^{a1}–C(R^{a2})(R^{a3})–L^{a2}–C(O)R^{PC},$$

PA

or a salt thereof, wherein:

R^{PA} is −H or an amino protecting group;

each of R^{a1} and R^{a3} is independently $-L^{a}–R'$;

R^{a2} is $-L^{aa}–C(O)R^{PS}$, wherein L^{aa} is L and L^{aa} comprises −N(R')− or −Cy−;

each of L^{a1} and L^{a2} is independently L;

$-C(O)R^{PS}$ is optionally protected or activated −COOH;

$-C(O)R^{PC}$ is optionally protected or activated −COOH;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2$−, $-S(O)_2N(R')$−, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −R, −C(O)R, $-CO_2R$, or $-SO_2R$; and

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms.

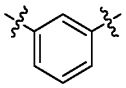
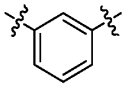
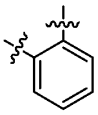
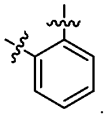
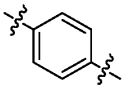
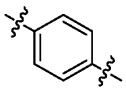
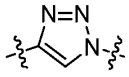
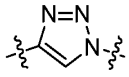
[0554] In some embodiments, L^{a1} is a covalent bond. In some embodiments, L^{a1} is not a covalent bond.

[0555] In some embodiments, L^{a2} is a covalent bond. In some embodiments, L^{a2} is not a covalent bond.

[0556] In some embodiments, R^{a2} is $-L^{aa}-C(O)R^{PS}$, wherein L^{aa} is an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−, wherein at least one methylene unit is replaced with −Cy−.

[0557] As used herein, in some embodiments, −Cy− is an optionally substituted bivalent 3-10 (e.g., 3, 4, 5, 6, 7, 8, 9, or 10) membered monocyclic cycloaliphatic group. In some embodiments, −Cy− is an optionally substituted 3-10 (e.g., 3, 4, 5, 6, 7, 8, 9, or 10) membered monocyclic cycloalkyl ring. In some embodiments, −Cy− is an optionally substituted 3-10 (e.g., 3, 4, 5, 6, 7, 8, 9, or 10) membered monocyclic heteroaliphatic ring having 1-5 heteroatoms. In some embodiments, −Cy− is an optionally substituted 3-10 (e.g., 3, 4, 5, 6, 7, 8, 9, or 10) membered monocyclic heteroalkyl ring having 1-5 heteroatoms. In some embodiments, −Cy− is an optionally substituted bivalent 5-15 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or 15) membered bicyclic or polycyclic cycloaliphatic group. In some embodiments, −Cy− is an optionally substituted bivalent 5-15 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or 15) membered bicyclic or polycyclic cycloalkyl group. In some embodiments, −Cy− is an optionally substituted 5-15 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or 15) membered bicyclic or polycyclic heteroaliphatic ring having 1-5 heteroatoms. In some embodiments, −Cy− is an optionally substituted 5-15 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or 15) membered bicyclic or polycyclic heterocyclyl ring having 1-5 heteroatoms. In some

embodiments, a cycloaliphatic, cycloalkyl, heteroaliphatic or heteroalkyl ring is 3-membered. In some embodiments, it is 4-membered. In some embodiments, it is 5-membered. In some embodiments, it is 6-membered. In some embodiments, it is 7-membered. In some embodiments, it is 8-membered. In some embodiments, it is 9-membered. In some embodiments, it is 10-membered. In some embodiments, it is 11-membered. In some embodiments, it is 12-membered. In some embodiments, −Cy− is optionally substituted phenylene. In some embodiments, −Cy− is an optionally substituted bivalent 10-membered bicyclic aryl ring. In some embodiments, −Cy− is an optionally substituted 5-membered heteroaryl ring having 1-4 heteroatoms. In some embodiments, −Cy− is an optionally substituted 6-membered heteroaryl ring having 1-4 heteroatoms. In some embodiments, −Cy− is an optionally substituted 9-membered bicyclic heteroaryl ring having 1-5 heteroatoms. In some embodiments, −Cy− is an optionally substituted 10-membered bicyclic heteroaryl ring having 1-5 heteroatoms. In some embodiments, a heteroaliphatic, heterocyclyl or heteroaryl ring contains no more than 1 heteroatom. In some embodiments, each heteroatom is independently selected from nitrogen, oxygen and sulfur.

[0558] In some embodiments, −Cy− is an optionally substituted 4-7 membered ring having 0-3 heteroatoms. In some embodiments, −Cy− is an optionally substituted 6-membered aryl ring. In some embodiments, an aryl ring is substituted. In some embodiments, it is substituted with one or more halogen. In some embodiments, it is substituted with one or more −F. In some embodiments, it is not substituted. In some embodiments, it is optionally substituted  . In some embodiments, it is  . In some embodiments, it is optionally substituted  . In some embodiments, it is  . In some embodiments, it is optionally substituted  . In some embodiments, it is  . In some embodiments, −Cy− is an optionally substituted 5-membered heteroaryl ring having 1-3 heteroatoms. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is sulfur. In some embodiments, −Cy− is optionally substituted  . In some embodiments, −Cy− is  .

[0559] In some embodiments, L^{aa} is $-L^{am1}-Cy-L^{am2}-$, wherein each of L^{am1} and L^{am2} is independently L^{am}, wherein each L^{am} is independently a covalent bond, or an optionally substituted,

bivalent C_1-C_{10} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−.

[0560] In some embodiments, L^{aa} comprises −Cy−. In some embodiments, L^{aa} is $-L^{am1}-Cy-L^{am2}-$, wherein each of L^{am1} and L^{am2} is independently L^{am}, wherein each L^{am} is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, $-L^{am2}-$ is bonded to $-C(O)R^{PS}$. In some embodiments, L^{am2} is a covalent bond.

[0561] In some embodiments, −Cy− is an optionally substituted 4-7 membered ring having 0-3 heteroatoms. In some embodiments, −Cy− is an optionally substituted 5-7 membered ring having 0-3 heteroatoms. In some embodiments, −Cy− is an optionally substituted 6-7 membered ring having 0-3 heteroatoms. In some embodiments, −Cy− is an optionally substituted 4-membered ring having 0-1 heteroatoms. In some embodiments, −Cy− is an optionally substituted 5-membered ring having 0-2 heteroatoms. In some embodiments, −Cy− is an optionally substituted 6-membered ring having 0-2 heteroatoms. In some embodiments, −Cy− is an optionally substituted 7-membered ring having 0-3 heteroatoms.

[0562] In some embodiments, R^{a2} is $-L^{aa}-C(O)R^{PS}$, wherein L^{aa} is an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−, wherein at least one methylene unit is replaced with −N(R')−.

[0563] In some embodiments, L^{aa} comprises −N(R')−. In some embodiments, L^{aa} is $-L^{am1}-(NR')-L^{am2}-$, wherein each of L^{am1} and L^{am2} is independently L^{am}, wherein each L^{am} is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−. In some embodiments, $-L^{am2}-$ is bonded to $-C(O)R^{PS}$. In some embodiments, L^{am1} is optionally substituted C_{1-4} alkylene. In some embodiments, L^{am1} is optionally substituted $-(CH_2)m-$, wherein m is 1, 2, 3, or 4. In some embodiments, L^{am1} is $-CH_2-$. In some embodiments, L^{am2} is optionally substituted linear C_{1-2} alkylene.

In some embodiments, L^{am2} is $-[C(R')_2]n$, wherein n is 1 or 2. In some embodiments, L^{am2} is $-[CHR']n$, wherein n is 1 or 2. In some embodiments, each R' is independently −H or optionally substituted C_{1-6} alkyl. In some embodiments, L^{am2} is optionally substituted $-CH_2-$. In some embodiments, L^{am2} is $-CH_2-$. In some embodiments, R' is $-R^{NR}$, wherein R^{NR} is R. In some embodiments, R' is $-CH_2-R^{NR}$, wherein R^{NR} is R. In some embodiments, R' of the $-N(R')-$ is $-C(O)R^{NR}$, wherein R^{NR} is R. In some embodiments, R' of the $-N(R')-$ is $-SO_2R^{NR}$, wherein R^{NR} is R. In some embodiments, R is optionally substituted C_{1-6} aliphatic or heteroaliphatic having 1-4 heteroatoms. In some embodiments, R^{NR} is C_{1-7} alkyl or heteroalkyl having 1-4 heteroatoms optionally substituted with one or more groups independently selected from halogen, a C_{5-6} aromatic ring having 0-4 heteroatoms, and an optionally substituted 3-10 membered cycloalkyl or heteroalkyl ring having 1-4 heteroatoms. In some embodiments, R is $-CF_3$. In some embodiments, L^{am2} is or comprises $-C(R')_2-$ wherein the R' group and R' in $-N(R')-$ are taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms.

[0564] In some embodiments, L^{aa} is $-L^{am1}-N(R')-L^{am2}-$, wherein each of L^{am1} and L^{am2} is independently L^{am}, wherein each L^{am} is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

[0565] In some embodiments, $-N(R')-$ is bonded to two carbon atoms which two carbon atoms do not form any double bonds with heteroatoms. In some embodiments, $-N(R')-$ is bonded to two sp3 atoms. In some embodiments, $-N(R')-$ is bonded to two sp3 carbon atoms. In some embodiments, $-N(R')-$ is bonded to two $-CH_2-$, each of which is independently and optionally substituted with one or two monovalent substituent. In some embodiments, $-N(R')-$ is bonded to two $-CH_2-$.

[0566] In some embodiments, L^{aa} comprises $-N(R')-$. In some embodiments, R' of the $-N(R')-$ is $-R^{NR}$, wherein R^{NR} is R. In some embodiments, R' of the $-N(R')-$ is $-CH_2-R^{NR}$, wherein R^{NR} is R, and the $-CH_2-$ is optionally substituted. In some embodiments, R' of the $-N(R')-$ is $-C(O)R^{NR}$, wherein R^{NR} is R. In some embodiments, R' of the $-N(R')-$ is $-SO_2R^{NR}$, wherein R^{NR} is R. In some embodiments, $-N(R')-$ is −N(Et)−. In some embodiments, $-N(R')-$ is $-N(CH_2CF_3)-$. In some embodiments, R' is optionally substituted C_{1-6} aliphatic or heteroaliphatic having 1-4 heteroatoms. In some embodiments, R' is C_{1-7} alkyl or heteroalkyl having 1-4 heteroatoms, wherein the alkyl or heteroalkyl is optionally substituted with one or more groups independently selected from halogen, a C_{5-6} aromatic ring having 0-4 heteroatoms, and an optionally substituted 3-10 membered cycloalkyl or heteroalkyl ring having 1-4 heteroatoms. In some embodiments, R^{NR} is $-CF_3$.

[0567] In some embodiments, R' of −N(R')− is R, R^{a3} is R, and the two R groups are taken together with their intervening atoms to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atoms. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered. In some embodiments, a formed ring is 7-membered. In some embodiments, a formed ring is monocyclic. In some embodiments, a formed ring is bicyclic or polycyclic. In some embodiments, a formed ring is saturated. In some embodiments, a formed ring is partially unsaturated.

[0568] In some embodiments, L^{am1} is a covalent bond. In some embodiments, L^{am1} is not a covalent bond. In some embodiments, L^{am1} is optionally substituted C_{1-4} alkylene. In some embodiments, L^{am1} is optionally substituted $-(CH_2)m-$, wherein m is 1, 2, 3, or 4. In some embodiments, L^{am1} is optionally substituted $-CH_2-$. In some embodiments, L^{am1} is $-CH_2-$.

[0569] In some embodiments, L^{am2} is bonded to $-C(O)R^{PS}$.

[0570] In some embodiments, L^{am2} is a covalent bond. In some embodiments, L^{am2} is a covalent bond when it is between −Cy− and $-C(O)R^{PS}$. In some embodiments, L^{am2} is not a covalent bond. In some embodiments, L^{am2} is optionally substituted C_{1-4} alkylene. In some embodiments, L^{am2} is optionally substituted $-(CH_2)m-$, wherein m is 1, 2, 3, or 4. In some embodiments, L^{am2} is optionally substituted linear C_{1-2} alkylene. In some embodiments, L^{am2} is $-[C(R')_2]n-$, wherein n is 1 or 2. In some embodiments, L^{am2} is $-[CHR']n-$, wherein n is 1 or 2. In some embodiments, each R' is independently −H or optionally substituted C_{1-6} alkyl. In some embodiments, L^{am2} is optionally substituted $-CH_2-$. In some embodiments, L^{am2} is $-CH_2-$. In some embodiments, L^{am2} is optionally substituted $-CH_2-CH_2-$. In some embodiments, L^{am2} is $-CH_2-C(CH_3)_2-$.

[0571] In some embodiments, L^{am2} is or comprises $-C(R')_2-$ wherein the R' group and R' in −N(R')− of L^{aa} are taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms.

[0572] In some embodiments, R^{a2} is $-L^{aa}-C(O)R^{PS}$, wherein L^{aa} is L as described herein. In some embodiments, L^{aa} is L^{am2} as described herein. In some embodiments, L^{aa} is optionally substituted branched or linear C_{1-10} hydrocarbon chain. In some embodiments, L^{aa} is optionally substituted C_{1-10} (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10) alkylene. In some embodiments, L^{aa} is optionally substituted $-CH_2-CH_2-$. In some embodiments, L^{aa} is $-CH_2-CH_2-$. In some embodiments, L^{aa} is optionally substituted $-CH_2-$. In some embodiments, L^{aa} is $-CH_2-$.

[0573] In some embodiments, L^{a} is L^{aa} as described herein.

[0574] In some embodiments, L^{aa} is L^{a} as described herein.

[0575] As described above, each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

[0576] In some embodiments, L is a covalent bond.

[0577] In some embodiments, L (or L^a, L^{aa}, L^{a1}, L^{a2}, L^{s1}, L^{s2}, L^{s3}, or another variable or moiety that can be L, or a linker moiety) is an optionally substituted, bivalent C_1-C_{25}, C_1-C_{20}, C_1-C_{15}, C_1-C_{10}, C_1-C_9, C_1-C_8, C_1-C_7, C_1-C_6, C_1-C_5, C_1-C_4, C_1-C_3, C_1-C_2, or C_1, C_2, C_3, C_4, C_5, C_6, C_7, C_8, C_9, C_{10}, C_{11}, C_{12}, C_{13}, C_{14}, C_{15}, C_{16}, C_{17}, C_{18}, C_{19}, or C_{20}, aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, L is an optionally substituted, bivalent C_1-C_{25} aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

[0578] In some embodiments, L, L^a, L^{aa}, L^{a1}, L^{a2}, L^{s1}, L^{s2}, L^{s3}, L", or another variable or moiety that can be L, or a linker moiety, is an optionally substituted, bivalent C_1-C_{25}, C_1-C_{20}, C_1-C_{15}, C_1-C_{10}, C_1-C_9, C_1-C_8, C_1-C_7, C_1-C_6, C_1-C_5, C_1-C_4, C_1-C_3, C_1-C_2, or C_1, C_2, C_3, C_4, C_5, C_6, C_7, C_8, C_9, C_{10}, C_{11}, C_{12}, C_{13}, C_{14}, C_{15}, C_{16}, C_{17}, C_{18}, C_{19}, or C_{20}, aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, it is an optionally substituted, bivalent C_1-C_{10}, C_1-C_9, C_1-C_8, C_1-C_7, C_1-C_6, C_1-C_5, C_1-C_4, C_1-C_3, C_1-C_2, or C_1, C_2, C_3, C_4, C_5, C_6, C_7, C_8, C_9, or C_{10}, aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, it is an optionally substituted, bivalent C_2 aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, it is an optionally substituted, bivalent C_3 aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some

embodiments, it is an optionally substituted, bivalent C_4 aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, it is an optionally substituted, bivalent C_5 aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, it is an optionally substituted, bivalent C_6 aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, the bivalent aliphatic is saturated. In some embodiments, the bivalent aliphatic is linear. In some embodiments, the bivalent aliphatic is branched. In some embodiments, it is an optionally substituted, bivalent linear saturated C_6 aliphatic wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, each replacement if any is independently with $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, each replacement if any is independently with $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, each replacement if any is independently with $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$. In some embodiments, each replacement if any is independently with $-O-$, $-S-$, $-N(R')-$, or $-C(O)-$. In some embodiments, L, L^a, L^{aa}, L^{a1}, L^{a2}, L^{s1}, L^{s2}, L^{s3}, L", or another variable or moiety that can be L, or a linker moiety, is an optionally substituted, bivalent C_1-C_6 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, or $-C(O)-$. In some embodiments, it is an optionally substituted, bivalent C_1-C_5 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, or $-C(O)-$. In some embodiments, it is an optionally substituted, bivalent C_1-C_4 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, or $-C(O)-$. In some embodiments, it is an optionally substituted, bivalent C_1-C_3 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, or $-C(O)-$. In some embodiments, it is an optionally substituted, bivalent C_1-C_2 linear saturated aliphatic wherein one or more methylene units is optionally and

independently replaced with −O−, −S−, −N(R')−, or −C(O)−. In some embodiments, it is a bivalent C_1-C_6 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with −O−, −S−, −N(R')−, or −C(O)−. In some embodiments, it is a bivalent C_1-C_5 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with −O−, −S−, −N(R')−, or −C(O)−. In some embodiments, it is a bivalent C_1-C_4 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with −O−, −S−, −N(R')−, or −C(O)−. In some embodiments, it is a bivalent C_1-C_3 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with −O−, −S−, −N(R')−, or −C(O)−. In some embodiments, it is a bivalent C_1-C_2 linear saturated aliphatic wherein one or more methylene units is optionally and independently replaced with −O−, −S−, −N(R')−, or −C(O)−. In some embodiments, there is no replacement of methylene unit. In some embodiments, there is one replacement. In some embodiments, there is two replacement. In some embodiments, there is three replacement. In some embodiments, there is four or more replacement. In some embodiments, R' in each moiety that is utilized to replace a methylene unit (e.g., −N(R')−) as described herein is hydrogen or optionally substituted C_{1-6} aliphatic or phenyl. In some embodiments, R' is each such moiety is hydrogen or optionally substituted C_{1-6} alkyl. In some embodiments, R' is each such moiety is hydrogen or C_{1-6} alkyl. In some embodiments, each −Cy− is optionally substituted bivalent ring selected from 3-10, 3-9, 3-8, 3-7, 5-10, 5-9, 5-8, 5-7, 5-6, or 3, 4, 5, 6, 7, 8, 9, or 10 membered cycloaliphatic and heterocyclylene having 1-3 heteroatoms, phenylene, and 5-6 membered heteroarylene having 1-3 heteroatoms. In some embodiments, −Cy− is optionally substituted bivalent 3-10, 3-9, 3-8, 3-7, 5-10, 5-9, 5-8, 5-7, 5-6, or 3, 4, 5, 6, 7, 8, 9, or 10 membered cycloaliphatic. In some embodiments, −Cy− is optionally substituted 3-10, 3-9, 3-8, 3-7, 5-10, 5-9, 5-8, 5-7, 5-6, or 3, 4, 5, 6, 7, 8, 9, or 10 membered heterocyclylene having 1-3 heteroatoms. In some embodiments, −Cy− is optionally substituted 3-10, 3-9, 3-8, 3-7, 5-10, 5-9, 5-8, 5-7, 5-6, or 3, 4, 5, 6, 7, 8, 9, or 10 membered heterocyclylene having 1 heteroatom. In some embodiments, −Cy− is optionally substituted phenylene. In some embodiments, −Cy− is phenylene. In some embodiments, −Cy− is optionally substituted 5-6 membered heteroarylene having 1-3 heteroatoms. In some embodiments, −Cy− is optionally substituted 5-6 membered heteroarylene having 1 heteroatom. In some embodiments, a heteroatom is nitrogen. In some embodiments, a heteroatom is oxygen. In some embodiments, a heteroatom is sulfur. In some embodiments, L, L^a, L^{aa}, L^{a1}, L^{a2}, L^{s1}, L^{s2}, L^{s3}, L'', or another variable or moiety that can be L, or a linker moiety, is optionally substituted $-(CH_2)n-$. In some embodiments, it is $-(CH_2)n-$. In some embodiments, n is 1. In some embodiments, n is 2. In some embodiments, n is 3. In some embodiments, n is 4. In some embodiments, n is 5. In some embodiments, n is 6. In some embodiments, n is 7. In some embodiments, n is 8. In some embodiments, n is 9. In some embodiments, n is 10.

[0579] In some embodiments, L, L^a, L^{aa}, L^{a1}, L^{a2}, L^{s1}, L^{s2}, L^{s3}, L", or another variable or moiety that can be L, or a linker moiety, is an optionally substituted, bivalent heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

[0580] Those skilled in the art appreciate that embodiments described for one linker moiety that can be L or L" (e.g., L^{aa}, L^{s1}, L^{s2}, L^{s3}, L^s, L^a, L^{a1}, L^{a2}, L^{RN}, etc.) may also be utilized for another group that can be L or L" to the extent that such embodiments fall within the definition of L or L".

[0581] As described above, each R' is independently $-R$, $-C(O)R$, $-CO_2R$, or $-SO_2R$. In some embodiments, R' is $-L^a-R$. In some embodiments, R' is R. In some embodiments, R' is $-C(O)R$. In some embodiments, R' is $-CO_2R$. In some embodiments, R' is $-SO_2R$. In some embodiments, R' is $-H$.

[0582] As described above, each R is independently $-H$, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms.

[0583] As described herein, in some embodiments, R is $-H$. In some embodiments, R is not $-H$. In some embodiments, R is optionally substituted C_{1-10} aliphatic. In some embodiments, R is optionally substituted C_{1-10} alkyl. In some embodiments, R is methyl. In some embodiments, R is ethyl. In some embodiments, R is isopropyl. In some embodiments, R is $-CF_3$. In some embodiments, R is $-CH_2CF_3$. In some embodiments, R is butyl. In some embodiments, R is t-butyl. In some embodiments, R is optionally substituted C_{3-10} cycloaliphatic. In some embodiments, R is optionally substituted C_{3-10} cycloalkyl. In some embodiments, R is optionally substituted cyclopropyl. In some embodiments, R is optionally substituted cyclobutyl. In some embodiments, R is optionally substituted cyclopentyl. In some embodiments, R is optionally substituted cyclohexyl. In some embodiments, R is optionally substituted phenyl. In some embodiments, R is phenyl. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1-3 heteroatoms. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted 6-

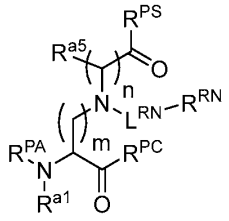
membered heteroaryl having 1-3 heteroatoms. In some embodiments, R is optionally substituted 6-membered heteroaryl having 1 heteroatom. In some embodiments, R is optionally substituted bicyclic 8-10 membered aromatic ring having 0-5 heteroatoms. In some embodiments, R is optionally substituted bicyclic 9-membered aromatic ring having 1-5 heteroatoms. In some embodiments, R is optionally substituted bicyclic 10-membered aromatic ring having 1-5 heteroatoms. In some embodiments, R is optionally substituted bicyclic 9-membered aromatic ring having 1 heteroatom. In some embodiments, R is optionally substituted bicyclic 10-membered aromatic ring having 1 heteroatom. In some embodiments, R is optionally substituted bicyclic 10-membered aromatic ring having no heteroatom. In some embodiments, R is optionally substituted 3-10 membered heterocyclyl having 1-5 heteroatoms. In some embodiments, R is optionally substituted 5-14 membered bicyclic heterocyclyl having 1-5 heteroatoms.

[0584] In some embodiments, two R groups (or two groups that can be R, e.g., two groups each independently selected from R', R^{a1}, R^{a2}, R^{a3}, R^{a5}, R^{RN}, etc.) are taken together with their intervening atom(s) to form an optionally substituted 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms. In some embodiments, a formed ring is substituted. In some embodiments, a formed ring is unsubstituted. In some embodiments, a formed ring is 3-30, 3-20, 3-15, 3-10, 3-9, 3-8, 3-7, 3-6, 4-10, 4-9, 4-8, 4-7, 4-6, 5-10, 5-9, 5-8, 5-7, 5-6, or 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 or 30 membered. In some embodiments, a formed ring is 3-10 membered. In some embodiments, a formed ring is 3-7 membered. In some embodiments, a formed ring is 4-10 membered. In some embodiments, a formed ring is 4-7 membered. In some embodiments, a formed ring is 5-10 membered. In some embodiments, a formed ring is 5-7 membered. In some embodiments, a formed ring is 3-membered. In some embodiments, a formed ring is 4-membered. In some embodiments, a formed ring is 5-membered. In some embodiments, a formed ring is 6-membered. In some embodiments, a formed ring is 7-membered. In some embodiments, a formed ring is 8-membered. In some embodiments, a formed ring is 9-membered. In some embodiments, a formed ring is 10-membered. In some embodiments, a formed ring is monocyclic. In some embodiments, a formed ring is bicyclic. In some embodiments, a formed ring is polycyclic. In some embodiments, a formed ring has no heteroatoms in addition to the intervening atom(s). In some embodiments, a formed ring has 1-10, e.g., 1-5, 1-3, or 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 heteroatoms in addition to the intervening atom(s). In some embodiments, a formed ring is saturated. In some embodiments, a formed ring is partially unsaturated. In some embodiments, a formed ring comprises one or more aromatic ring. In some embodiments, a formed ring is bicyclic or polycyclic, and each monocyclic unit is independently 3-10 membered, saturated, partially unsaturated or aromatic and having 0-5 heteroatoms. In some embodiments, each heteroatom is independently selected from nitrogen,

oxygen and sulfur.

[0585] In some embodiments, a group that can be R, e.g., R', R^{a1}, R^{a2}, R^{a3}, R^{a5}, R^{RN}, etc., is R as described herein. Those skilled in the art appreciate that embodiments described for one group that can be R may also be utilized for another group that can be R to the extent that such embodiments fall within the definition of R.

[0586] In some embodiments, the present disclosure provides compounds having the structure of



PA-a

or a salt thereof, wherein:

each of m and n is independently 1, 2, 3, or 4;

L^{RN} is L;

R^{RN} is R; and

R^{a5} is R'.

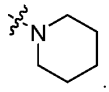
[0587] In some embodiments, m is 1. In some embodiments, m is 2. In some embodiments, m is 3. In some embodiments, m is 4.

[0588] In some embodiments, n is 1. In some embodiments, n is 2. In some embodiments, n is 3. In some embodiments, n is 4.

[0589] In some embodiments, L^{RN} is $-CH_2-$, $-CO-$, or $-SO_2-$. In some embodiments, L^{RN} is $-CH_2-$. In some embodiments, L^{RN} is $-CO-$. In some embodiments, L^{RN} is $-SO_2-$. In some embodiments, L^{RN} is optionally substituted bivalent C_{1-4} alkylene. In some embodiments, L^{RN} is optionally substituted bivalent linear C_{1-4} alkylene. In some embodiments, L^{RN} is $-CH_2-CH_2-$. In some embodiments, L^{RN} is $-CH_2-CH_2-CH_2-$. In some embodiments, L^{RN} is $-C(CH_3)-$.

[0590] In some embodiments, R^{RN} is R as described herein. In some embodiments, R^{RN} is C_{1-7} alkyl or heteroalkyl having 1-4 heteroatoms, wherein the alkyl or heteroalkyl is optionally substituted with one or more groups independently selected from halogen, a C_{5-6} aromatic ring having 0-4 heteroatoms, and an optionally substituted 3-10 membered cycloalkyl or heteroalkyl ring having 1-4 heteroatoms.

[0591] In some embodiments, R (e.g., R^{RN}, R', etc.) is optionally substituted aliphatic, e.g., C_{1-10} aliphatic. In some embodiments, R is optionally substituted alkyl, e.g., C_{1-10} alkyl. In some embodiments, R is optionally substituted cycloalkyl, e.g., C_{1-10} cycloalkyl. In some embodiments, R is

optionally substituted aryl. In some embodiments, R is optionally substituted heterocyclyl. In some embodiments, R is optionally substituted heteroaryl. In some embodiments, is methyl. In some embodiments, R is $-CF_3$. In some embodiments, R is ethyl. In some embodiments, R is  . In some embodiments, R is phenyl. In some embodiments, R is pentafluorophenyl. In some embodiments, R is pyridinyl.

[0592] In some embodiments, one or more R^{a5} are independently –H. In some embodiments, one or more R^{a5} are independently optionally substituted C_{1-6} alkyl. In some embodiments, each R^{a5} is –H.

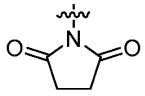
[0593] In some embodiments, $-L^{RN}-R^{RN}$ is R, and is taken together with a R^{a5} and their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms.

[0594] As described in the present disclosure, various rings, including those in various moieties (e.g., R or various groups that can be R, various bivalent rings such as those in –Cy–) and those formed by two entities (e.g., two groups that are or can be R) taken together with their intervening forms, can be various sizes, e.g., 3-30. In some embodiments, a ring is 3-30-membered. In some embodiments, a ring is 3-20 membered. In some embodiments, a ring is 3-10 membered. In some embodiments, a ring is e.g., 3, 4, 5, 6, 7, 8, 9, or 10-membered. In some embodiments, a ring is 3-membered. In some embodiments, a ring is 4-membered. In some embodiments, a ring is 5-membered. In some embodiments, a ring is 6-membered. In some embodiments, a ring is 7-membered. In some embodiments, a ring is 8-membered. In some embodiments, a ring is 9-membered. In some embodiments, a ring is 10-membered. In some embodiments, a ring is substituted (in addition to potential groups already drawn out in formulae). In some embodiments, a ring is not substituted. In some embodiments, a ring is saturated. In some embodiments, a ring is partially unsaturated. In some embodiments, a ring is aromatic. In some embodiments, a ring comprise one or more, e.g., 1-5, heteroatoms. In some embodiments, one or more heteroatoms are oxygen. In some embodiments, one or more heteroatoms are nitrogen. In some embodiments, one or more heteroatoms are sulfur. In some embodiments, a ring is a cycloaliphatic, e.g., cycloalkyl ring. In some embodiments, a ring is a heterocycloaliphatic, e.g., heterocycloalkyl ring. In some embodiments, a ring is an aryl ring. In some embodiments, a ring is a heteroaryl ring. In some embodiments, a ring is a heteroaryl ring. In some embodiments, a ring is monocyclic. In some embodiments, a ring is bicyclic or polycyclic. In some embodiments, each monocyclic unit in a ring is independently an optionally substituted, 3-10 membered (e.g., 3, 4, 5, 6, 7, 8, 9, or 10-membered) , saturated, partially unsaturated or aromatic ring having 0-5 heteroatoms.

[0595] As described herein, in some embodiments, a heteroatom is selected from nitrogen, oxygen,

sulfur, silicon and phosphorus. As described herein, in some embodiments, a heteroatom is selected from nitrogen, oxygen, and sulfur.

[0596] In some embodiments, R^{a1} is −H. In some embodiments, R^{a1} is optionally substituted C_{1-6} alkyl. In some embodiments, R^{a1} are taken together with another group, e.g., R^{a3} and their intervening atoms to form an optionally substituted ring as described herein.

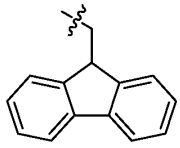
[0597] In some embodiments, $-C(O)R^{PC}$ is a protected carboxylic acid group. In some embodiments, $-C(O)R^{PC}$ is an activated carboxylic acid group. Those skilled in the art will appreciate that various groups are available for protecting/activating carboxyl groups, including various groups that are useful in peptide synthesis, and can be utilized in accordance with the present disclosure. In some embodiments, $-C(O)R^{PC}$ is an ester. In some embodiments, $-C(O)R^{PC}$ is an activated ester for synthesis. In some embodiments, $-C(O)R^{PC}$ is −C(O)OR'. In some embodiments, R' is R. In some embodiments, R' is optionally substituted C_{1-10} aliphatic. In some embodiments, R' optionally substituted phenyl. In some embodiments, R' is pentafluorophenyl. In some embodiments, R' is  .

[0598] In some embodiments, $-C(O)R^{PC}$ is −COOH.

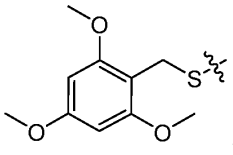
[0599] In some embodiments, $-C(O)R^{PS}$ is a protected carboxylic acid group. In some embodiments, $-C(O)R^{PS}$ is an activated carboxylic acid group if it is to be reacted with another moiety. Those skilled in the art will appreciate that various groups are available for protecting/activating carboxyl groups, including various groups that are useful in peptide synthesis, and can be utilized in accordance with the present disclosure. In some embodiments, $-C(O)R^{PS}$ is an ester. In some embodiments, $-C(O)R^{PS}$ is an ester. In some embodiments, $-C(O)R^{PS}$ is −C(O)OR'. In some embodiments, R' is R. In some embodiments, R is optionally substituted C_{1-10} aliphatic. In some embodiments, R optionally substituted phenyl. In some embodiments, R is optionally substituted t-Bu. In some embodiments, R is t-Bu. In some embodiments, R is benzyl. In some embodiments, R is allyl. In some embodiments, $-C(O)R^{PS}$ is a protected carboxylic acid group that is compatible with peptide synthesis (e.g., Fmoc-based peptide synthesis). In some embodiments, $-C(O)R^{PS}$ is a protected carboxylic acid group which is orthogonal to $-C(O)R^{PC}$ and R^{PA}, and remains intact when $-C(O)R^{PC}$ and/or $N(R^{PA})(R^{a1})$ are protected, deprotected, and/or reacted (e.g., in peptide synthesis such as Fmoc-based peptide synthesis). In some embodiments, $-C(O)R^{PS}$ is deprotected at a late stage during synthesis, e.g., after a peptide backbone is or is largely constructed such that an unprotected side chain −COOH does not impact synthesis.

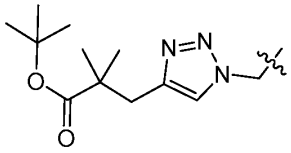
[0600] In some embodiments, $-C(O)R^{PS}$ is −COOH.

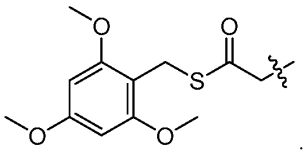
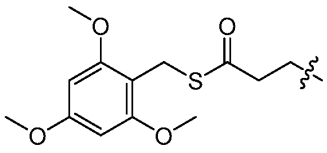
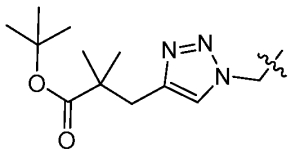
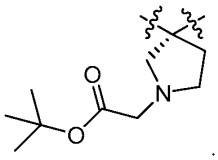
[0601] As described above, R^{PA} is −H or an amino protecting group. In some embodiments, R^{PA} is –H. In some embodiments, R^{PA} is an amino protecting group. In some embodiments, R^{PA} is an amino

protecting group suitable for peptide synthesis. In some embodiments, R^{PA} is −C(O)−O−R, wherein R is optionally substituted  . In some embodiments, R^{PA} is −Fmoc. In some embodiments, R^{PA} is –Cbz. In some embodiments, R^{PA} is −Boc.

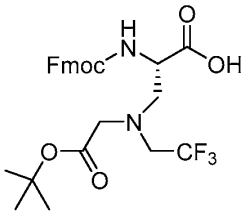
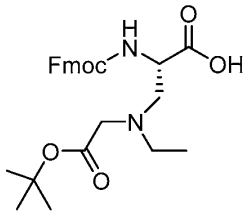
[0602] In some embodiments, R^{PS} is a protecting group orthogonal to R^{PA}. In some embodiments, R^{PS} is a protecting group orthogonal to R^{PC}. In some embodiments, R^{PS} is compatible with peptide synthesis. In some embodiments, R^{PS} is optionally substituted C_{1-6} aliphatic. In some embodiments, R^{PS} is t-butyl.

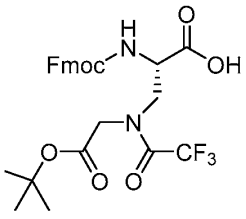
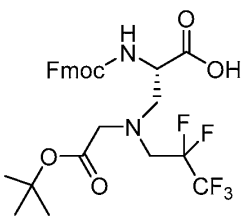
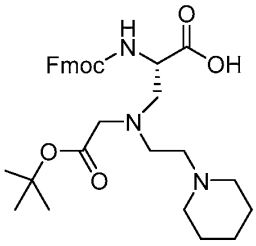
[0603] In some embodiments, R^{PS} is −S−L−R', wherein each variable is independently as described herein. In some embodiments, L is optionally substituted $-CH_2-$. In some embodiments, L is $-CH_2-$. In some embodiments, R^{PS} is $-S-CH_2-R'$, wherein R' is as described herein. In some embodiments, R' is R as described herein. In some embodiments, R is optionally substituted C_{6-30} aryl. In some embodiments, R is optionally substituted C_{6-10} aryl. In some embodiments, R is optionally substituted phenyl. In some embodiments, R is phenyl. In some embodiments, R is substituted phenyl wherein one or more substituents are independently alkoxy. In some embodiments, R is 2, 4, 6-trimethoxyphenyl. In some embodiments, R is optionally substituted 5-30 membered heteroaryl having 1-10 heteroatoms. In some embodiments, R is optionally substituted 5-10 membered heteroaryl having 1-4 heteroatoms. In some embodiments, R is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms. In some embodiments, R^{PS} is $-S-CH_2-Cy-R'$, wherein the $-CH_2-$ is optionally substituted, and −Cy− is as described herein. In some embodiments, R^{PS} is $-S-CH_2-Cy-O-R'$, wherein the $-CH_2-$ is optionally substituted, and −Cy− is as described herein. In some embodiments, −Cy− is an optionally substituted aromatic ring. In some embodiments, −Cy− is optionally substituted phenylene. In some embodiments, −Cy− is 2, 6-dimethoxy-1, 4-phenylene. In some embodiments, −Cy− is 2, 4, 6-trimethoxy-1, 3-phenylene. In some embodiments, R^{PS} is  . In some embodiments, R^{PS} is −SH.

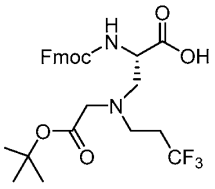
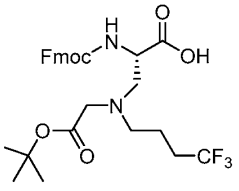
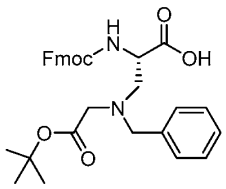
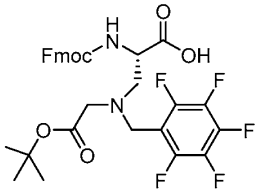
[0604] In some embodiments, R^{a2} is  . In some embodiments, R^{a2} is

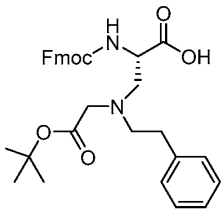
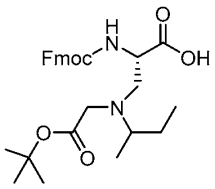
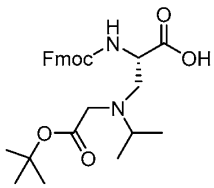
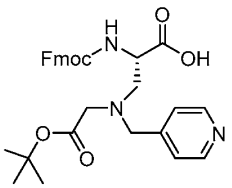

. In some embodiments, R^{a2} is 
. In some embodiments, R^{a2} is 
. In some embodiments, $-C(R^{a2})(R^{a3})-$ is 
.

[0605] In some embodiments, a provided compound, e.g., an amino acid is selected from:


(TfeGA)

(EtGA)

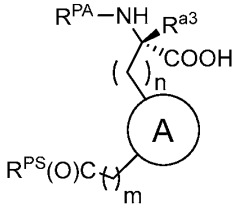




[0606] In some embodiments, R^{a2} is R^{a2} in a compound described above (a non-hydrogen group attached to an alpha carbon).

[0607] In some embodiments, the present disclosure provides compounds having the structure of:



PA-b

or a salt thereof, wherein:

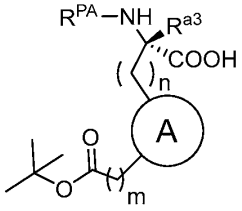
Ring A is an optionally substituted 3-10 membered ring;

n is 0-6;

m is 0-6.

[0608] In some embodiments, m is 0. In some embodiments, m is 1-6.

[0609] In some embodiments, the present disclosure provides compounds having the structure of:



PA-c

or a salt thereof, wherein:

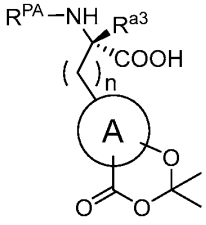
Ring A is an optionally substituted 3-10 membered ring;

n is 0-6; and

m is 0-6.

[0610] In some embodiments, m is 0. In some embodiments, m is 1-6.

[0611] In some embodiments, the present disclosure provides compounds having the structure of:



PA-d

or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring; and

n is 0-6.

[0612] In some embodiments, n is 0. In some embodiments, n is 1. In some embodiments, n is 2. In some embodiments, n is 3. In some embodiments, n is 4. In some embodiments, n is 5. In some embodiments, n is 6. In some embodiments, n is 0, 1, or 2.

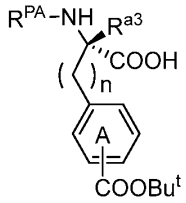
[0613] In some embodiments, m is 0. In some embodiments, m is 1. In some embodiments, m is 2. In some embodiments, m is 3. In some embodiments, m is 4. In some embodiments, m is 5. In some embodiments, m is 6. In some embodiments, m is 1, 2, or 3.

[0614] In some embodiments, Ring A is a ring as described herein. In some embodiments, Ring A is 3-membered. In some embodiments, Ring A is 4-membered. In some embodiments, Ring A is 5-membered. In some embodiments, Ring A is 6-membered. In some embodiments, Ring A is 7-membered. In some embodiments, Ring A is 8-membered. In some embodiments, Ring A is 9-membered. In some embodiments, Ring A is 10-membered. In some embodiments, Ring A is saturated. In some embodiments, Ring A is partially unsaturated. In some embodiments, Ring A is aromatic. In some embodiments, Ring A has no additional heteroatoms in addition to the nitrogen atom. In some embodiments, Ring is unsubstituted. In some embodiments, Ring A is substituted with one or more halogen. In some embodiments, Ring A is substituted with one or more −F. In some embodiments, Ring A has a carbon substituted with two −F. In some embodiments, $-C(O)R^{PS}$ is at 2'-position (N being position 1). In some embodiments, $-C(O)R^{PS}$ is at 3'-position. In some embodiments, $-C(O)R^{PS}$ is at 4'-position. In some embodiments, $-C(O)R^{PS}$ is attached to a chiral center, e.g., a chiral carbon atom. In some embodiments, a chiral center is *R*. In some embodiments, a chiral center is *S*. In some embodiments, Ring A is bonded to $-(CH_2)n-$ at a chiral carbon which is *R*. In some embodiments, Ring A is bonded to $-(CH_2)n-$ at a chiral carbon which is *S*. In some embodiments, $-(CH_2)n-$ is at position 2 (the N is at position 1). In some embodiments, $-(CH_2)n-$ is at position 3 (the N is at position 1). In some embodiments, $-(CH_2)n-$ is at position 4 (the N is at position 1).

[0615] In some embodiments, Ring A is substituted. In some embodiments, substituents on Ring A are of suitable properties, e.g., volumes, for various utilizations. In some embodiments, substituents are independently selected from halogen, −R, $-CF_3$, $-N(R)_2$, −CN, and −OR, wherein each R is independently C_{1-6} aliphatic optionally substituted with one or more −F. In some embodiments, substituents are independently selected from halogen, C_{1-5} linear, branched or cyclic alkyl, −OR wherein R is C_{1-4} linear, branched or cyclic alkyl, fluorinated alkyl, $-N(R)_2$ wherein each R is independently C_{1-6} linear, branched or cyclic alkyl, or −CN. In some embodiments, substituents are selected from halogen, a C_{5-6} aromatic ring having 0-4 heteroatoms, and an optionally substituted 3-10 membered cycloalkyl or

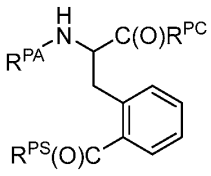
heteroalkyl ring having 1-4 heteroatoms. In some embodiments, a substituent is halogen. In some embodiments, it is −F. In some embodiments, it is −Cl. In some embodiments, it is −Br. In some embodiments, it is −I. In some embodiments, a substituent is optionally substituted C_{1-4} alkyl. In some embodiments, a substituent is C_{1-4} alkyl. In some embodiments, it is methyl. In some embodiments, it is ethyl. In some embodiments, it is i-Pr. In some embodiments, a substituent is C_{1-4} haloalkyl. In some embodiments, a substituent is C_{1-4} alkyl optionally substituted with one or more −F. In some embodiments, it is $-CF_3$. In some embodiments, it is −CN. In some embodiments, it is −OR wherein R is optionally substituted C_{1-4} alkyl. In some embodiments, it is −OR wherein R is C_{1-4} alkyl. In some embodiments, it is −OR wherein R is C_{1-4} haloalkyl. In some embodiments, it is −OR wherein R is C_{1-4} alkyl optionally substituted with one or more −F. In some embodiments, it is $-OCF_3$.

[0616] In some embodiments, Ring A is or comprises an optionally substituted saturated monocyclic ring. In some embodiments, Ring A is or comprises an optionally substituted partially unsaturated monocyclic ring. In some embodiments, Ring A is or comprises an optionally substituted aromatic monocyclic ring. In some embodiments, Ring A is optionally substituted phenyl. In some embodiments, Ring A is optionally substituted 5-6 membered heteroaryl having 1-3 heteroatoms. In some embodiments, Ring A is optionally substituted 5-6 membered heteroaryl having 1-3 heteroatoms, wherein at least one heteroatom is nitrogen. In some embodiments, Ring A is an optionally substituted 8-10 membered bicyclic ring having 1-6 heteroatoms. In some embodiments, Ring A is an optionally substituted 8-10 membered bicyclic aromatic ring having 1-6 heteroatoms, wherein each monocyclic unit is independently an optionally 5-6 membered aromatic ring having 0-3 heteroatoms. In some embodiments, Ring A is bonded to $-(CH_2)n-$ at a carbon atom. In some embodiments, Ring A is bonded to $-(CH_2)n-$ at a nitrogen atom. In some embodiments, Ring A or −Cy− in L^{aa} is optionally substituted, and each substitute is independently selected from halogen, −R, $-CF_3$, $-N(R)_2$, −CN, and −OR, wherein each R is independently C_{1-6} aliphatic optionally substituted with one or more −F. In some embodiments, Ring A or −Cy− in L^{aa} is optionally substituted, and each substitute is independently selected from halogen, C_{1-5} linear, branched or cyclic alkyl, −OR wherein R is C_{1-4} linear, branched or cyclic alkyl, fluorinated alkyl, $-N(R)_2$ wherein each R is independently C_{1-6} linear, branched or cyclic alkyl, or −CN.

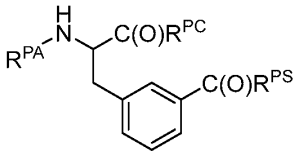
[0617] In some embodiments, Ring A is optionally substituted phenyl. In some embodiments, the present disclosure provides a compound of formula 

or a salt thereof, wherein Ring A is optionally substituted phenyl, and each variable is as described herein.

[0618] In some embodiments, the present disclosure provides compounds having the structure of

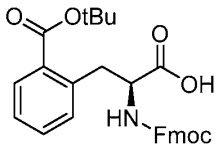


or a salt thereof, wherein each variable is independent as described herein. In some embodiments, the present disclosure provides compounds having the structure of

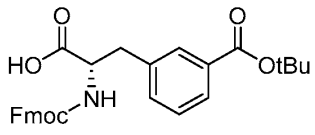


or a salt thereof, wherein each variable is independent as described herein.

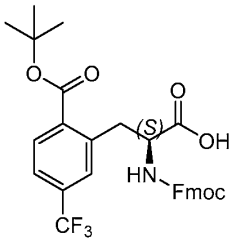
[0619] In some embodiments, a compound is selected from:

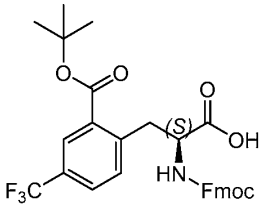


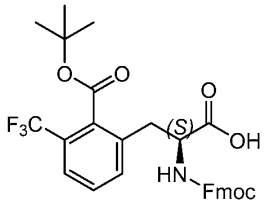
(2COOHF)

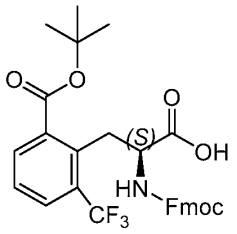


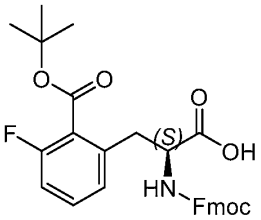
(3COOHF)

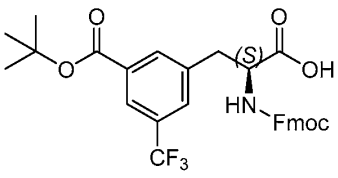


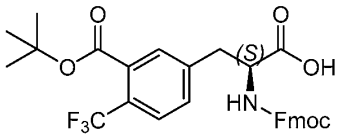


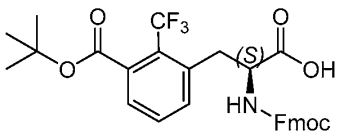


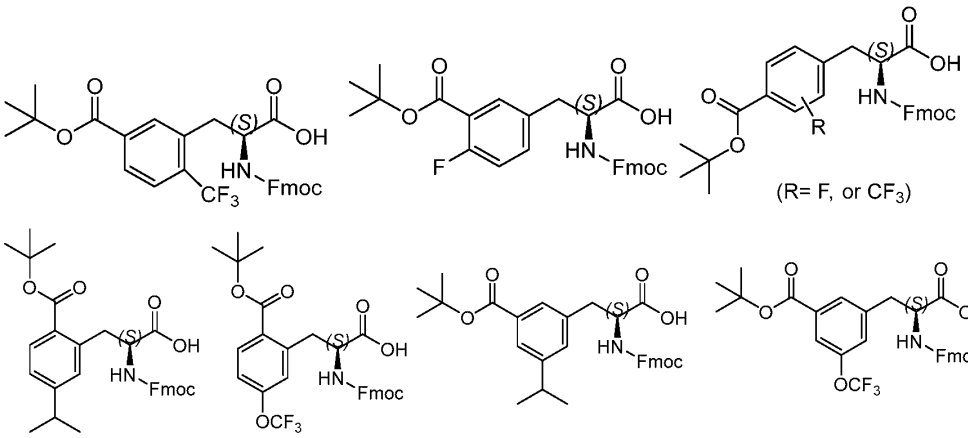




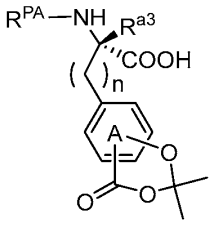




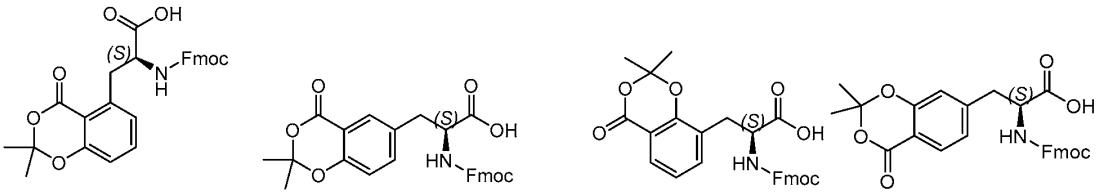




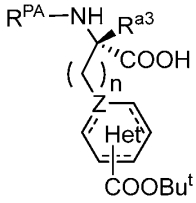
[0620] In some embodiments, the present disclosure provides a compound of formula



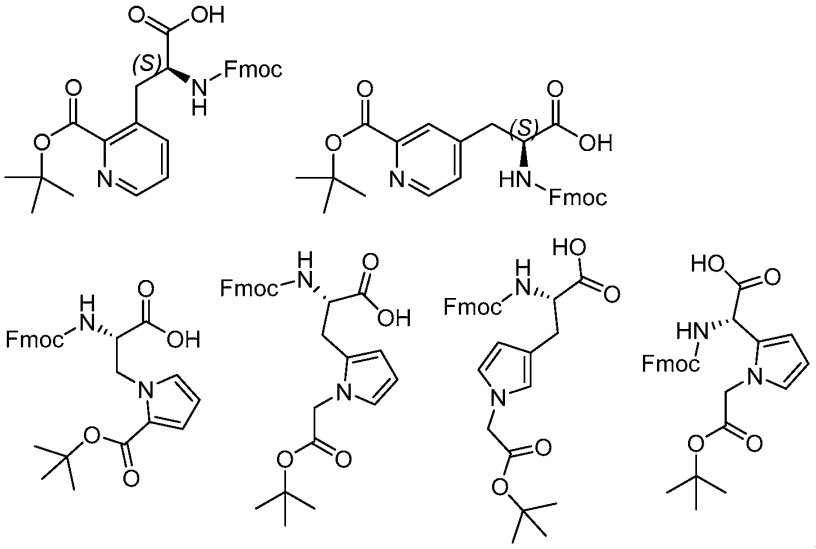
or a salt thereof, wherein Ring A is optionally substituted phenyl, and each variable is as described herein. In some embodiments, a compound is selected from:



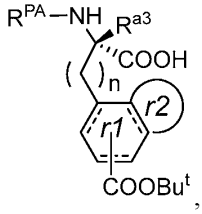
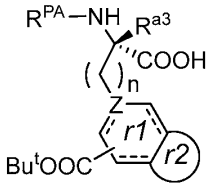
[0621] In some embodiments, Ring A is an optionally substituted 5- or 6-membered heteroaryl having 1-4 heteroatoms. In some embodiments, a provided compound has the structure of

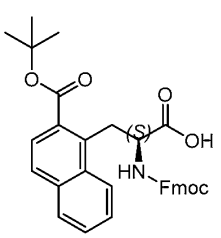
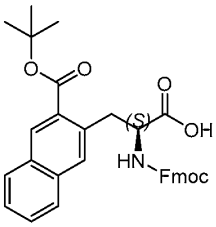
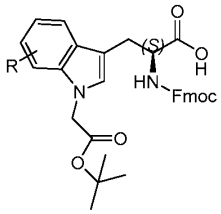


, wherein Z is carbon or a heteroatom, Ring Het is an optionally substituted 5- or 6-membered heteroaryl having 1-4 heteroatoms, and each other variable is independently as described herein. In some embodiments, a provided compound is selected from:

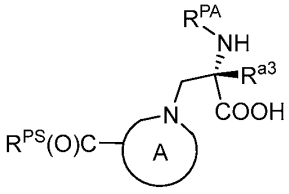


[0622] In some embodiments, Ring A is a 8-10 membered bicyclic aryl or a heteroaryl ring having 1-5 heteroatoms. In some embodiments, Ring A is a 10-membered bicyclic aryl ring. In some embodiments, Ring A is a 8-membered bicyclic heteroaryl ring having 1-5 heteroatoms. In some embodiments, Ring A is a 9-membered bicyclic heteroaryl ring having 1-5 heteroatoms. In some embodiments, Ring A is a 10-membered bicyclic heteroaryl ring having 1-5 heteroatoms. In some embodiments, Ring A is an optionally substituted 5- or 6-membered heteroaryl having 1-4 heteroatoms.

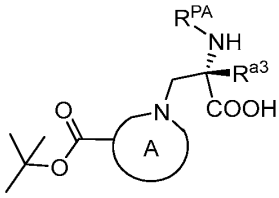
In some embodiments, a provided compound has the structure of  , wherein each of Ring r1 and r2 is independently an optionally substituted 5- or 6-membered aryl or heteroaryl ring having 1-4 heteroatoms, and each other variable is independently as described herein. In some embodiments, a provided compound has the structure of  , wherein Z is carbon or a heteroatom, each of Ring r1 and r2 is independently an optionally substituted 5- or 6-membered aryl or heteroaryl ring having 1-4 heteroatoms, and each other variable is independently as described herein. In some embodiments, a provided compound is selected from:

[0623] In some embodiments, the present disclosure provides a compound of structure

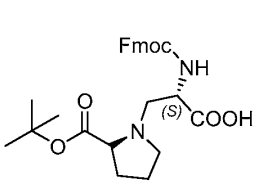
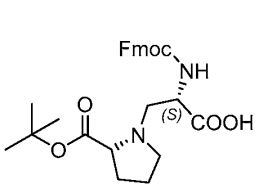
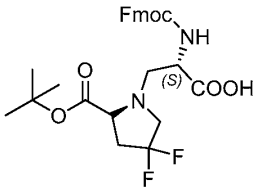
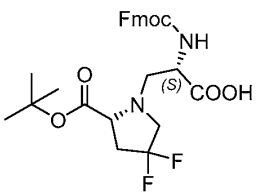
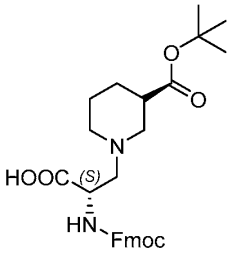
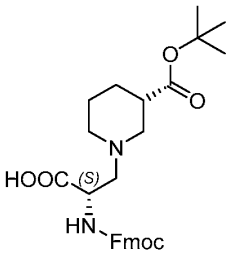
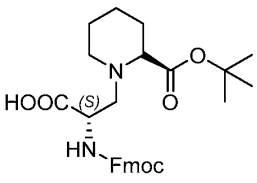
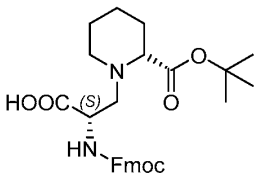


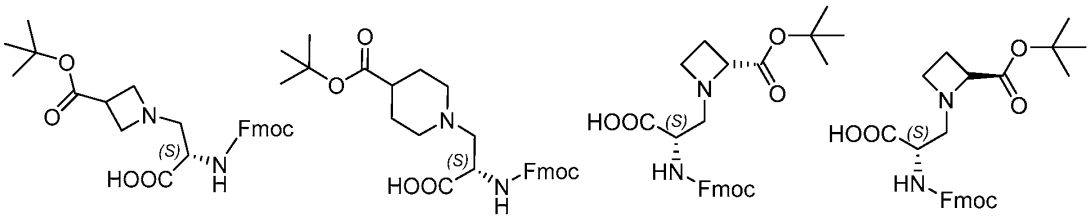
or a salt thereof. In some embodiments, $-C(O)R^{PS}$ is $-C(O)-OtBu$. In some embodiments, the present disclosure provides a compound of structure



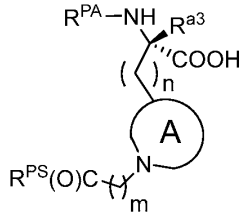
or a salt thereof, wherein each variable is independently as described herein.

[0624] In some embodiments, a provided compound is selected from:

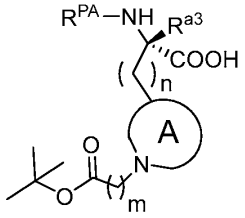











[0625] In some embodiments, the present disclosure provides compounds having the structure of

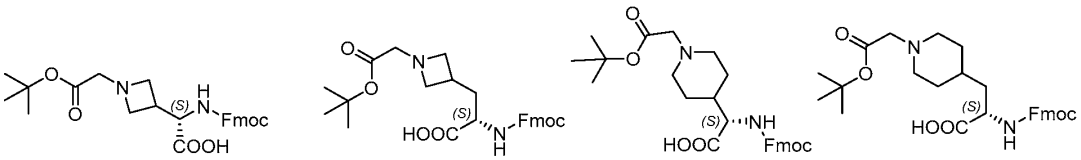


or a salt thereof, wherein each variable is independently as described herein. In some embodiments, the present disclosure provides compounds having the structure of



or a salt thereof, wherein each variable is independently as described herein.

[0626] In some embodiments, a provided compound is selected from:



[0627] In some embodiments, a provided compound is an amino acid. In some embodiments, a provided compound is a protected amino acid. In some embodiments, a provided compound is a protected and/or activated amino acid. In some embodiments, a provided compound is suitable for

[0628] In some embodiments, a ring moiety of, e.g., −Cy−, R (including those formed by R groups taken together), etc. is monocyclic. In some embodiments, a ring moiety is bicyclic or polycyclic. In some embodiments, a monocyclic ring is an optionally substituted 3-10 (3, 4, 5, 6, 7, 8, 9, or 10, 3-8, 3-7, 4-7, 4-6, 5-6, etc.) membered, saturated, partially unsaturated or aromatic ring having 0-5 heteroatoms. In some embodiments, each monocyclic ring unit of a bicyclic or polycyclic ring moiety is independently an optionally substituted 3-10 (3, 4, 5, 6, 7, 8, 9, or 10, 3-8, 3-7, 4-7, 4-6, 5-6, etc.) membered, saturated, partially unsaturated or aromatic ring having 0-5 heteroatoms.

[0629] In some embodiments, each heteroatom is independently selected from oxygen, nitrogen,

sulfur, phosphorus and silicon. In some embodiments, each heteroatom is independently selected from oxygen, nitrogen, and sulfur.

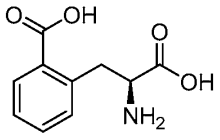
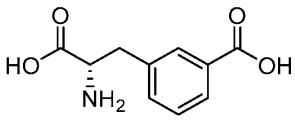
[0630] In some embodiments, L^{a1} is a covalent bond. In some embodiments, a compound of formula PA is of the structure $NH(R^{a1})-C(R^{a2})(R^{a3})-L^{a2}-COOH$.

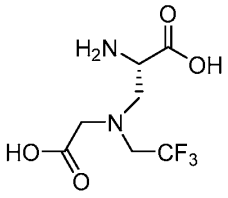
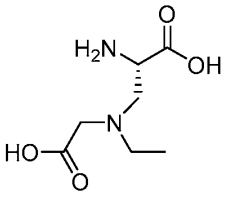
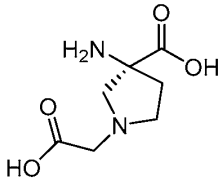
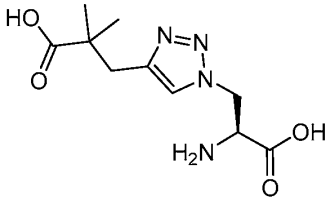
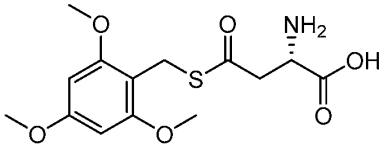
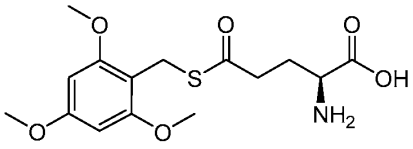
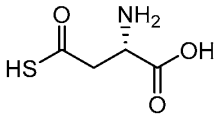
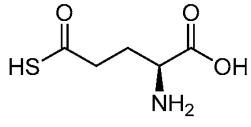
[0631] In some embodiments, L^{a2} is a covalent bond. In some embodiments, a compound of formula PA is of the structure $NH(R^{a1})-C(R^{a2})(R^{a3})-L^{a2}-COOH$.

[0632] In some embodiments, L^{a1} is a covalent bond and L^{a2} is a covalent bond. In some embodiments, a compound of formula PA is of the structure $NH(R^{a1})-C(R^{a2})(R^{a3})-COOH$.

[0633] In some embodiments, an amino acid is suitable for stapling. In some embodiments, an amino acid comprises a terminal olefin.

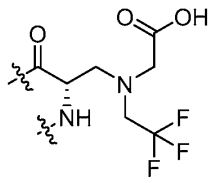
[0634] In some embodiments, an amino acid has the structure of $NH(R^{a1})-L^{a1}-C(-L^{aa}-COOH)(R^{a3})-L^{a2}-COOH$, or a salt thereof, wherein each variable is independently as described in the present disclosure. In some embodiments, L^{aa} is $-L^{am1}-N(R')-L^{am2}-$, wherein each variable is as described herein. In some embodiments, each of L^{am1} and L^{am2} is optionally substituted bivalent C_{1-6} aliphatic. In some embodiments, each of L^{am1} and L^{am2} is bivalent C_{1-6} aliphatic. In some embodiments, each of L^{am1} and L^{am2} is optionally substituted bivalent C_{1-6} alkyl. In some embodiments, each of L^{am1} and L^{am2} is bivalent C_{1-6} alkyl. In some embodiments, each of L^{am1} and L^{am2} is optionally substituted bivalent linear C_{1-6} alkyl. In some embodiments, each of L^{am1} and L^{am2} is bivalent linear C_{1-6} alkyl. In some embodiments, L^{am1} is $-CH_2-$. In some embodiments, L^{am2} is a covalent bond. In some embodiments, L^{am2} is $-CH_2-$. In some embodiments, both L^{am1} and L^{am2} are $-CH_2-$. In some embodiments, L^{am1} is $-CH_2-$ and L^{am2} is a covalent bond. In some embodiments, $-N(R')-$ is $-N(Et)-$. In some embodiments, $-N(R')-$ is $-N(CH_2CF_3)-$. In some embodiments, L^{aa} is $-L^{am1}-Cy-L^{am2}-$, wherein each variable is as described herein. In some embodiments, $-Cy-$ is optionally substituted phenyl. In some embodiments, $-Cy-$ is optionally substituted 5-6 membered heteroaryl having 1-4 heteroatoms.

[0635] In some embodiments, a compound is  (2COOHF) or a salt thereof. In some embodiments, a compound is  (3COOHF) or a salt thereof. In some

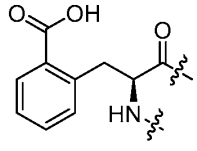
embodiments, a compound is  (TfeGA) or a salt thereof. In some embodiments, a compound is  (EtGA) or a salt thereof. In some embodiments, a compound is  or a salt thereof. In some embodiments, a compound is  or a salt thereof. In some embodiments, a compound is  or a salt thereof. In some embodiments, a compound is  or a salt thereof. In some embodiments, a compound is  or a salt thereof. In some embodiments, a compound is  or a salt thereof. Among other things, such compounds may be utilized as amino acid residues in peptides including stapled peptides.

[0636] In some embodiments, the present disclosure provides a compound, e.g., a peptide, comprising a residue of a compound of formula PA or a salt form thereof. In some embodiments, a

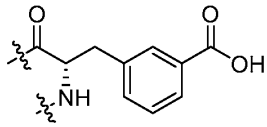
residue has the structure of $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$ or a salt form thereof, wherein each variable is independently as described herein. In some embodiments, a residue has the structure of $-N(R^{a1})-L^{a1}-C(-L^{aa}-COOH)(R^{a3})-L^{a2}-C(O)-$ or a salt form thereof, wherein each variable is independently as described herein. For example, in some embodiments, a residue is



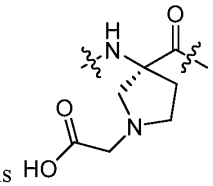
or a salt form thereof. In some embodiments, a residue is



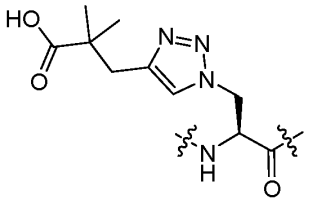
or a salt form thereof. In some embodiments, a residue is



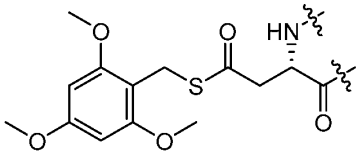
or a salt form thereof. In some embodiments, a residue is



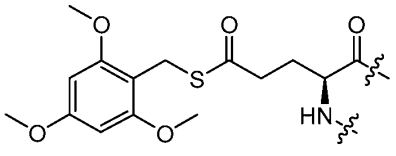
or a salt form thereof. In some embodiments, a residue is



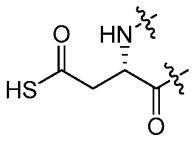
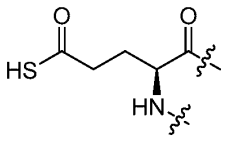
or a salt form thereof. In some embodiments, a residue is



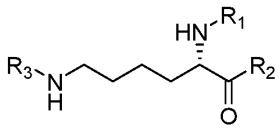
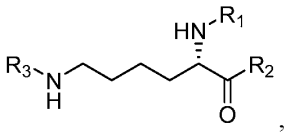
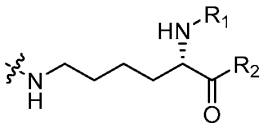
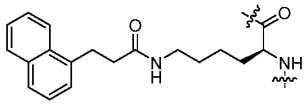
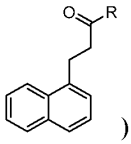
or a salt form thereof. In some embodiments, a residue is



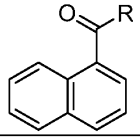
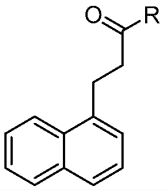
or a salt form thereof.

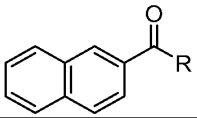
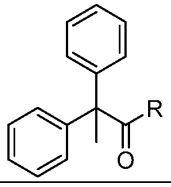
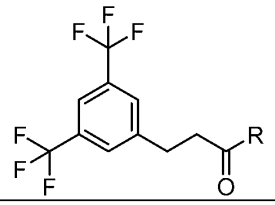
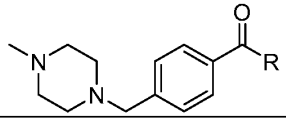
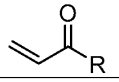
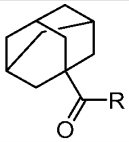
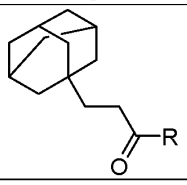
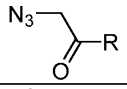
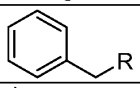
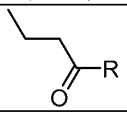
 

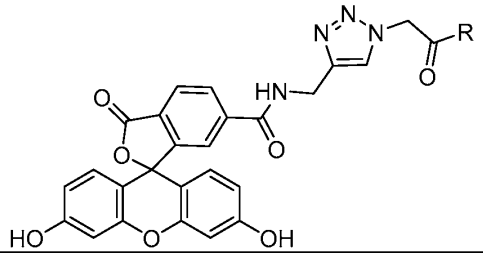
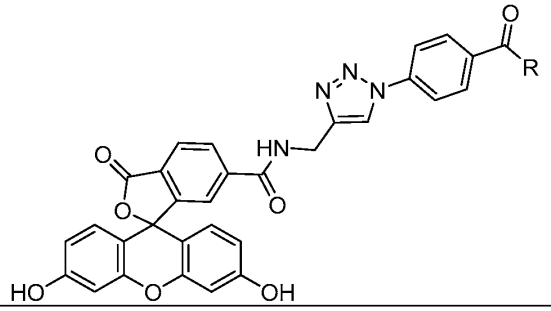
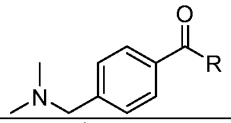
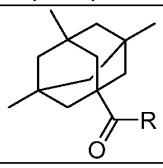
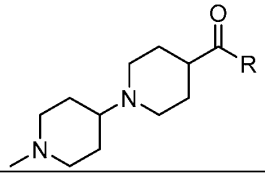
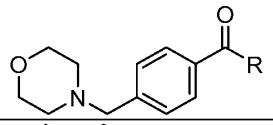
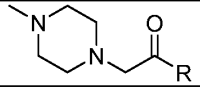
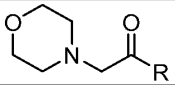
or a salt form thereof. In some embodiments, a residue is or a salt form thereof.

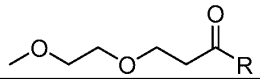
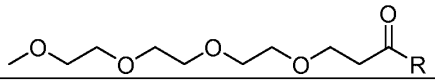
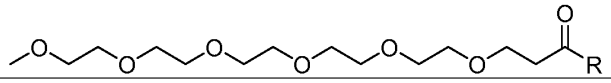
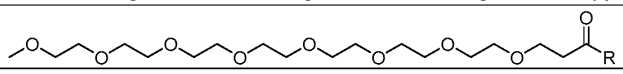
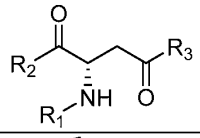
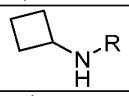
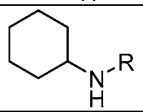
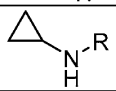
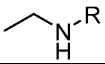
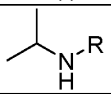
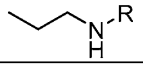
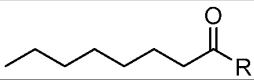
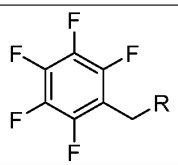
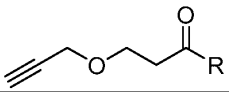
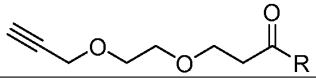
[0637] In some embodiments, an amino acid, or a structure moiety of an amino acid or an agent (e.g., a peptide), is selected from below. Brackets indicate that a moiety is attached at R_3 position of an amino acid, for instance, for a Lys with a bracket moiety  , a bracket moiety would replace R_3 (when there is no bracket preceding an amino acid, e.g., Lys, then R_3 is hydrogen). For a bracket structure, R or R_1 indicate a moiety connected to the bracket structure (for  , R would be ). For example, a [1NapPr]Lys residue has the structure of  ([1NaPr] is ). R_1 is the N-term (and connects to the carboxylate of the previous amino acid residue, or a N-terminal cap, or is −H for an amino acid). R_2 is the C-term (and connects to the N-term of the next amino acid residue, or a C-terminal group, or is −OH for an amino acid). R_3 indicates a potential bracket moiety (or is H if no moiety is indicated). Typically, after linear peptide synthesis, the terminal olefins of all residues are linked by ring-closing metathesis.

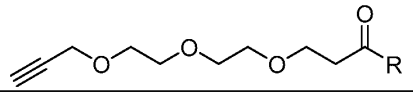
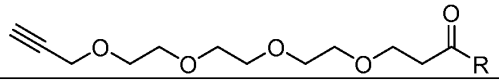
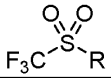
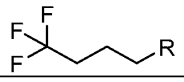
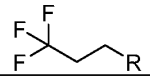
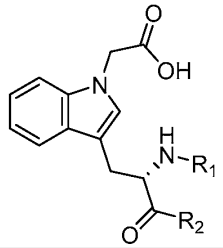
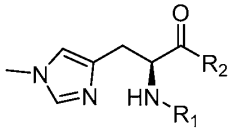
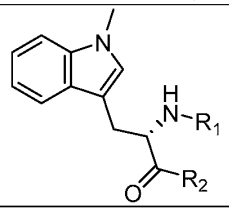
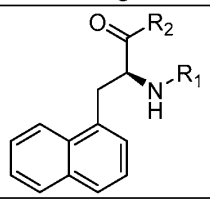
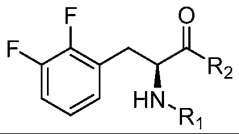
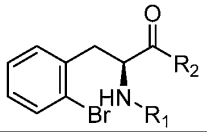
[0638] Table A-IV. Certain useful compounds or moieties.

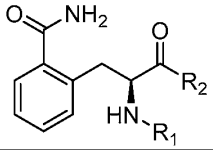
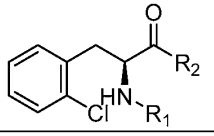
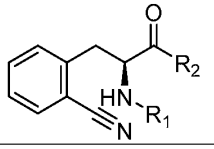
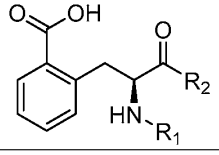
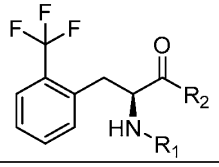
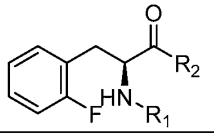
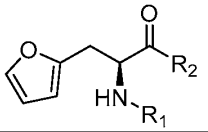
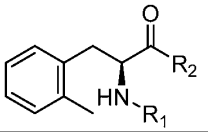
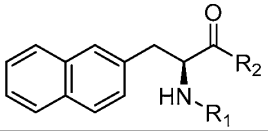
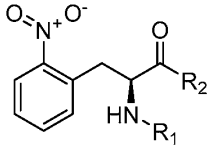
Compound / Bracket Moiety	Structure
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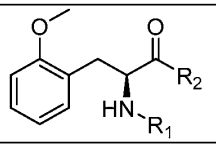
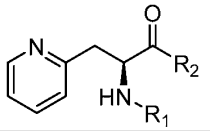
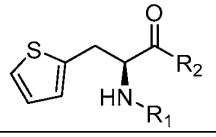
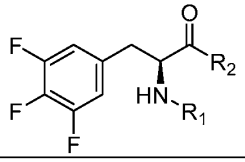
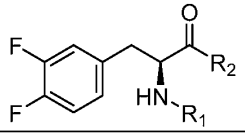
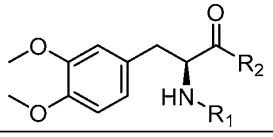
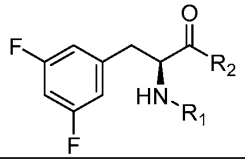
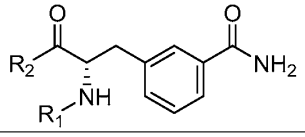
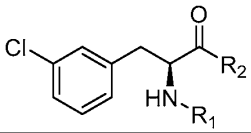
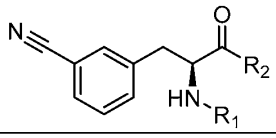
Compound / Bracket Moiety	Structure
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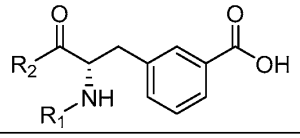
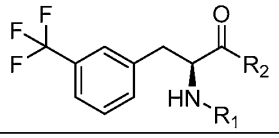
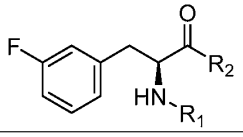
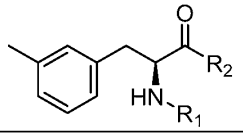
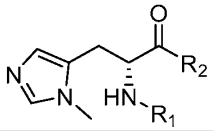
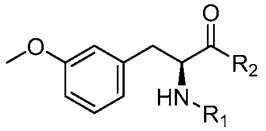
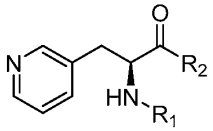
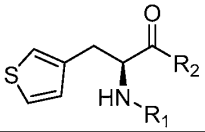
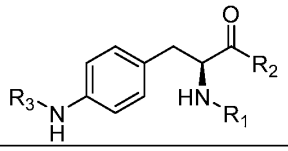
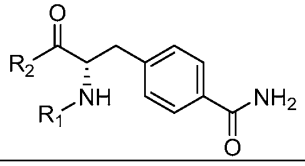
Compound / Bracket Moiety	Structure
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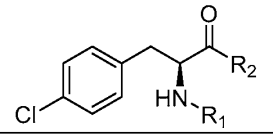
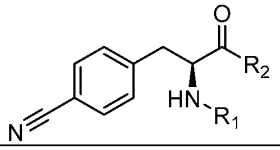
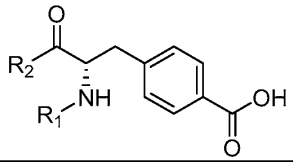
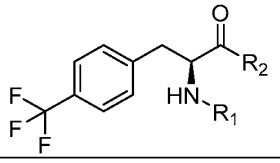
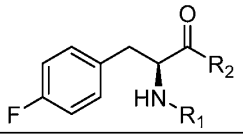
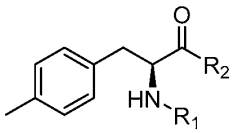
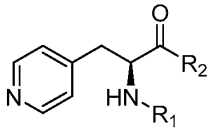
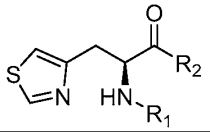
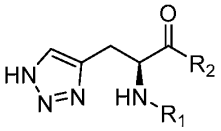
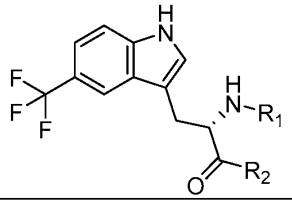
Compound / Bracket Moiety	Structure
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[NHCyBu]	
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[NHCyPr]	
[NHEt]	
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[NHMe]	
[NHnPr]	
[Oct]	
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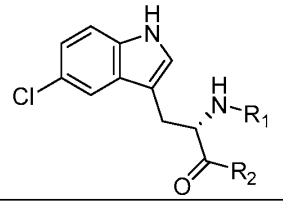
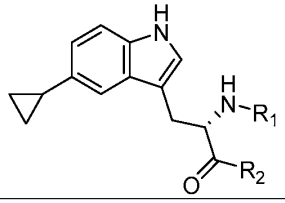
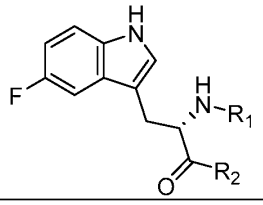
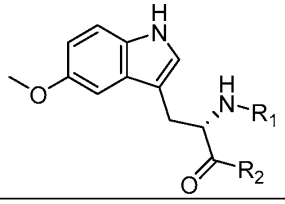
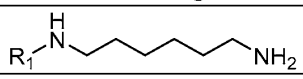
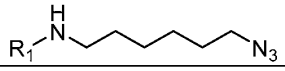
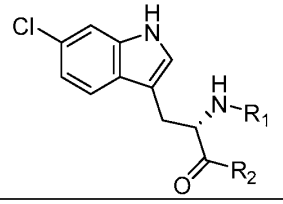
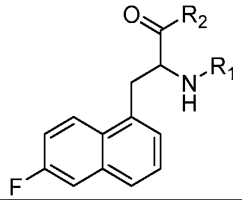
Compound / Bracket Moiety	Structure
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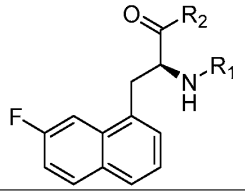
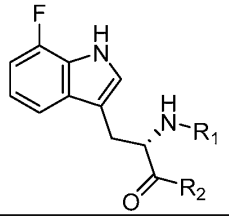
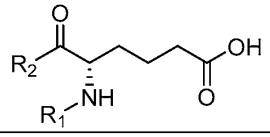
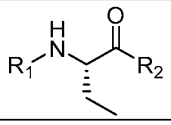
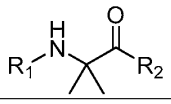
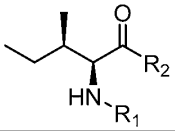
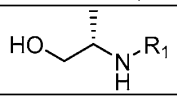
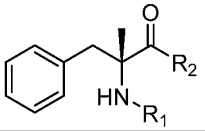
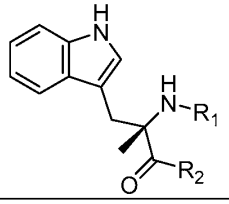
Compound / Bracket Moiety	Structure
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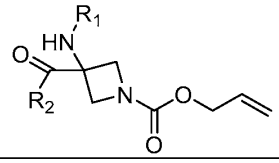
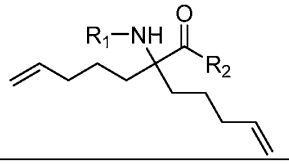
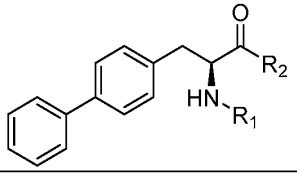
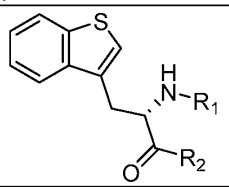
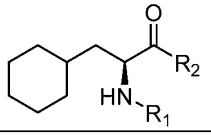
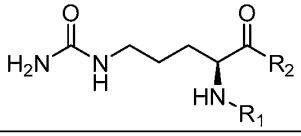
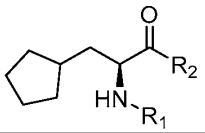
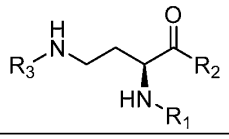
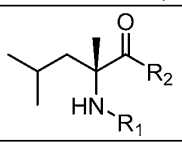
Compound / Bracket Moiety	Structure
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2Thi	
345FF	
34FF	
34OMeF	
35FF	
3CBMF	
3ClF	
3CNF	

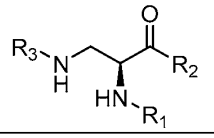
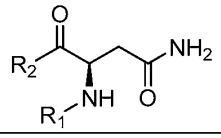
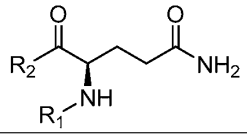
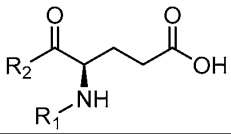
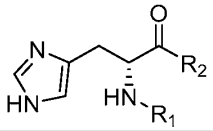
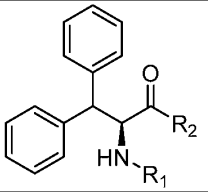
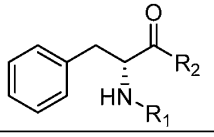
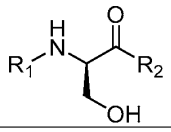
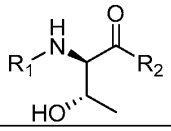
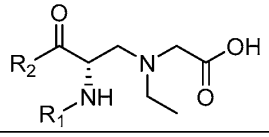
Compound / Bracket Moiety	Structure
3COOHF	
3F3MeF	
3FF	
3MeF	
3meH	
3OMeF	
3pyrA	
3Thi	
4AmPhe	
4CBMF	

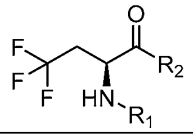
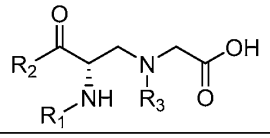
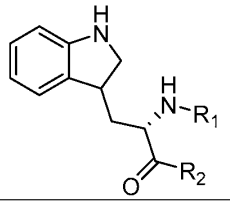
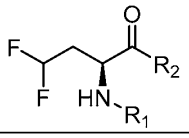
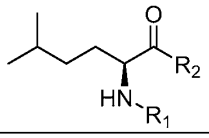
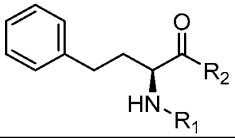
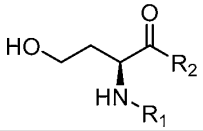
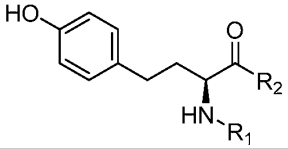
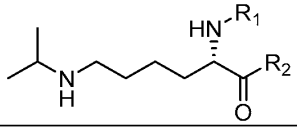
Compound / Bracket Moiety	Structure
4ClF	
4CNF	
4COOHF	
4F3MeF	
4FF	
4MeF	
4pyrA	
4Thz	
4TriA	
5CF3W	

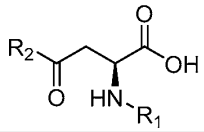
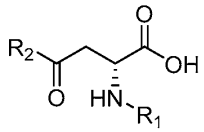
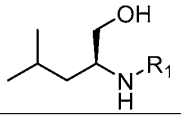
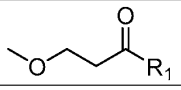
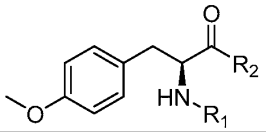
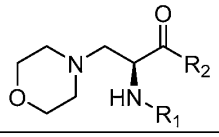
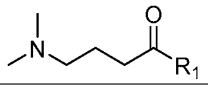
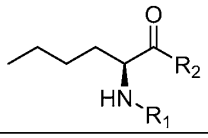
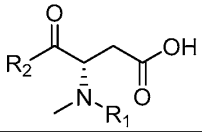
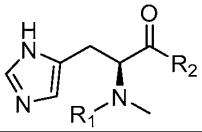
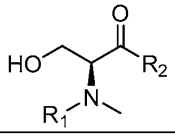
Compound / Bracket Moiety	Structure
5ClW	
5CpW	
5FW	
5MeOW	
6AmHex	
6AzHex	
6ClW	
6F1NapA	

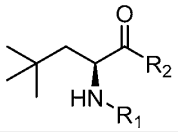
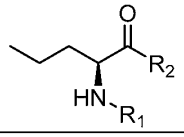
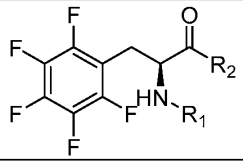
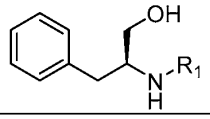
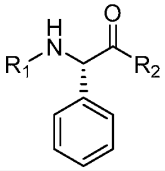
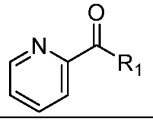
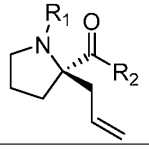
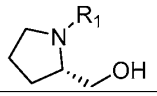
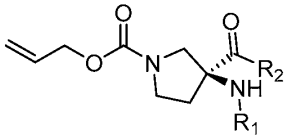
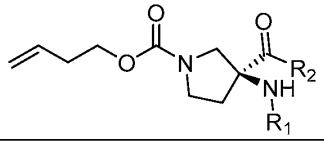
Compound / Bracket Moiety	Structure
7F1NapA	
7FW	
Aad	
Abu	
Aib	
aIle	
Alaol	
aMeDF	
aMeW	

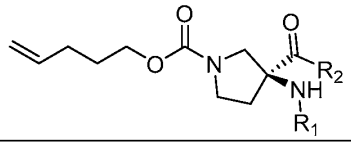
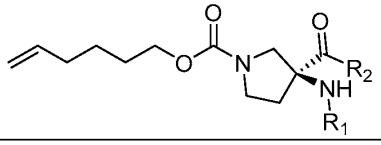
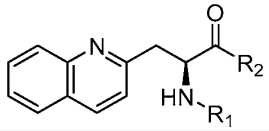
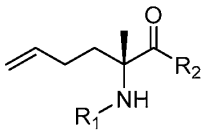
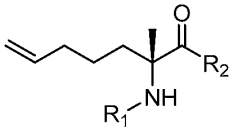
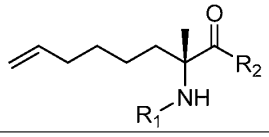
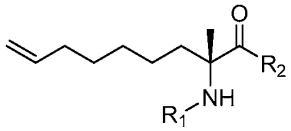
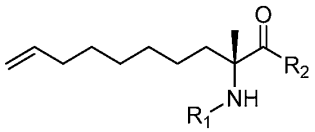
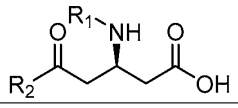
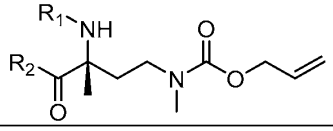
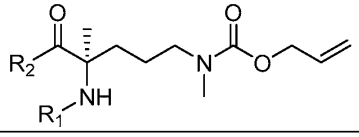
Compound / Bracket Moiety	Structure
Az	
B5	
Bip	
BztA	
Cha	
Cit	
CypA	
Dab	
DaMeL	

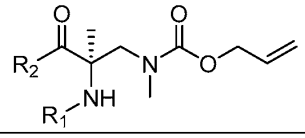
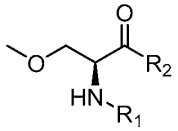
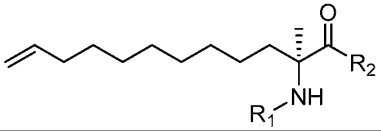
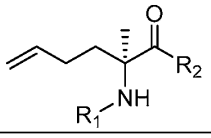
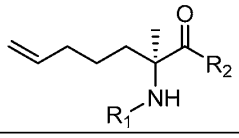
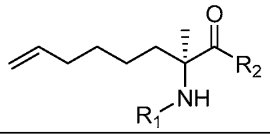
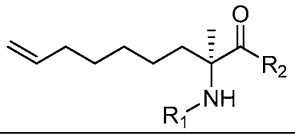
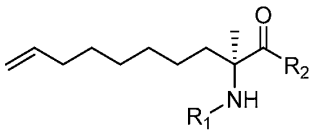
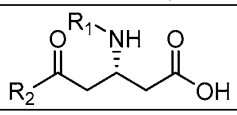
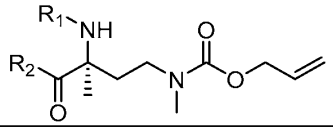
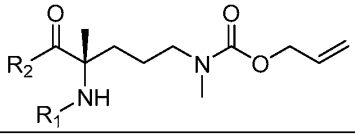
Compound / Bracket Moiety	Structure
Dap	
dAsn	
dGln	
DGlu	
dHis	
DipA	
dPhe	
dSer	
dThr	
EtGA	

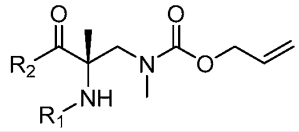
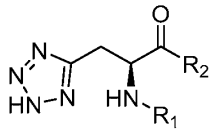
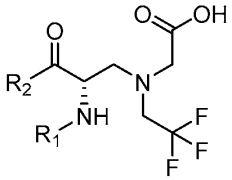
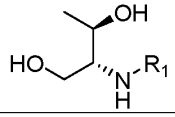
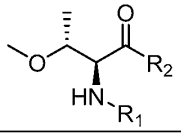
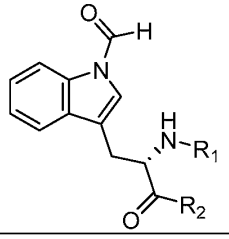
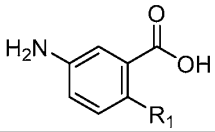
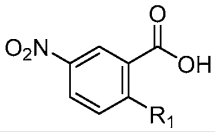
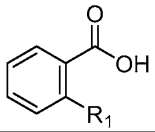
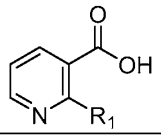
Compound / Bracket Moiety	Structure
F3CA	
GA	
H2Trp	
HF2CA	
hLeu	
Hleu	same as above
hPhe	
Hse	
hSe	same as above
hTyr	
iPrLys	

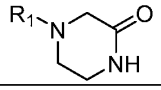
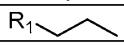
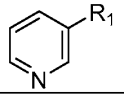
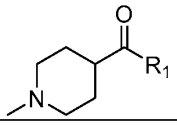
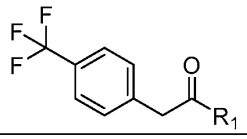
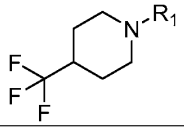
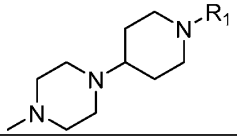
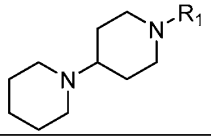
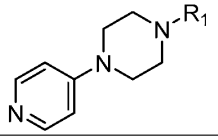
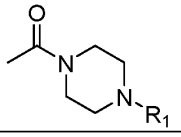
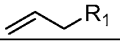
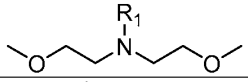
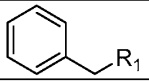
Compound / Bracket Moiety	Structure
isoAsp	
isoDAsp	
Leuol	
MeOPr	
MeTyr	
MorphAla	
NdiMeButC	
nLeu	
NMeD	
NMeHis	
NMeS	

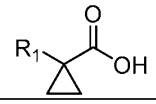
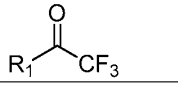
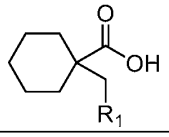
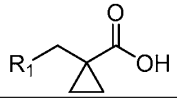
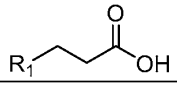
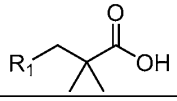
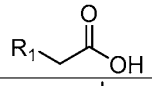
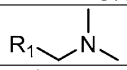
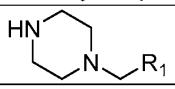
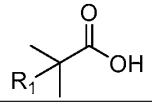
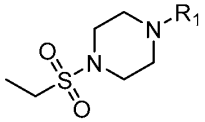
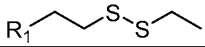
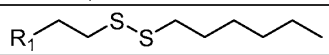
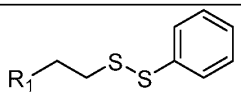
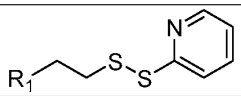
Compound / Bracket Moiety	Structure
Npg	
npG	same as above
Nva	
Pff	
Pheol	
Phg	
Pic	
PL3	
Prool	
PyrS	
PyrS1	

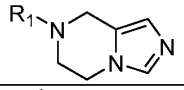
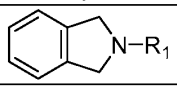
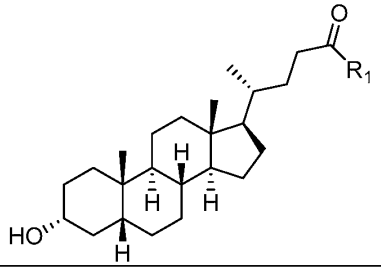
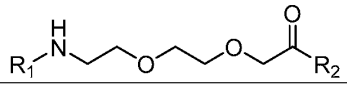
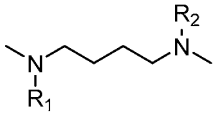
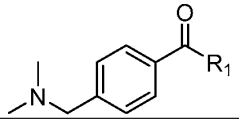
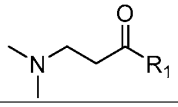
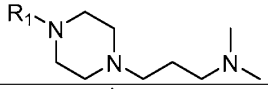
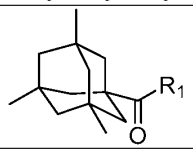
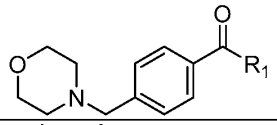
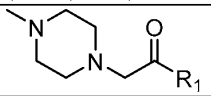
Compound / Bracket Moiety	Structure
PyrS2	
PyrS3	
Qui	
R4	
R5	
R6	
R7	
R8	
RbGlu	
RdN	
ReN	

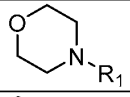
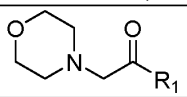
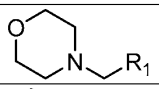
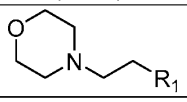
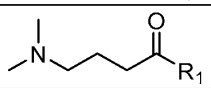
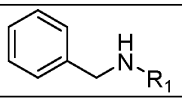
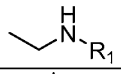
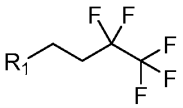
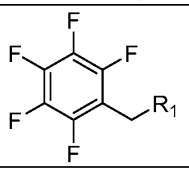
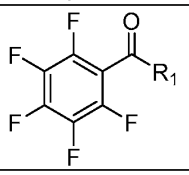
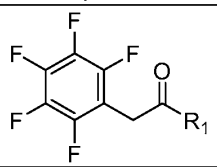
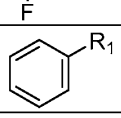
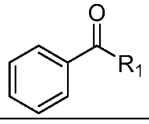
Compound / Bracket Moiety	Structure
RgN	
S(Ome)	
S(Ome)	same as above
S10	
S4	
S5	
S6	
S7	
S8	
SbGlu	
SdN	
SeN	

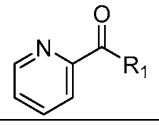
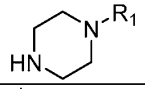
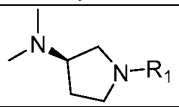
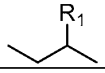
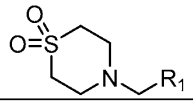
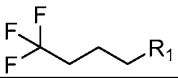
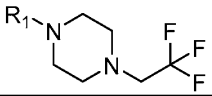
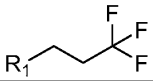
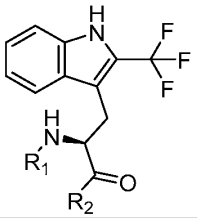
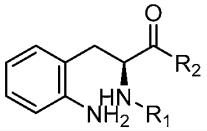
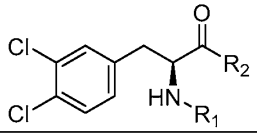
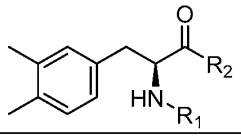
Compound / Bracket Moiety	Structure
SgN	
tetz	
TfeGA	
Throl	
TOMe	
WCHO	
[2COOH4NH2Ph]	
[2COOH4NO2Ph]	
[2COOHPh]	
[2Nic]	

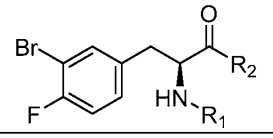
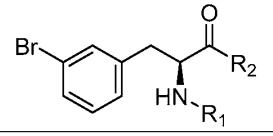
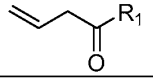
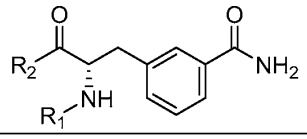
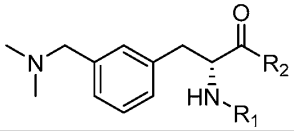
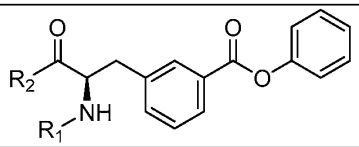
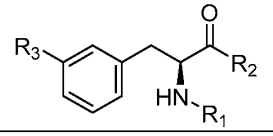
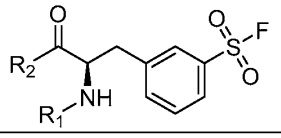
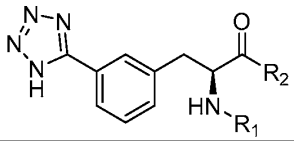
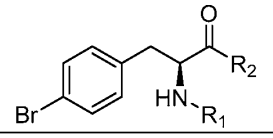
Compound / Bracket Moiety	Structure
[2OxoPpz]	
[3C]	
[3Py]	
[4AcMePip]	
[4CF3PhAc]	
[4F3CPip]	
[4MePpzPip]	
[4Pippip]	
[4PyPip]	
[Ac]	
[AcPpz]	
[Allyl]	
[bismethoxyethylamine]	
[Bn]	

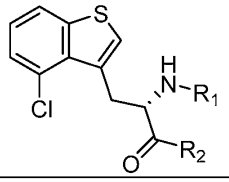
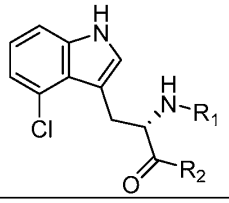
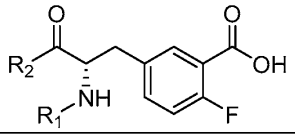
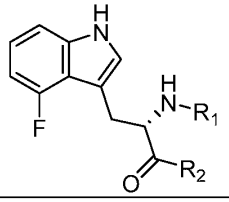
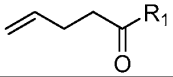
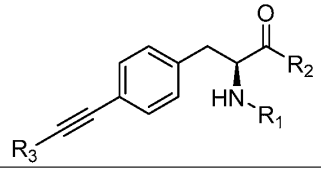
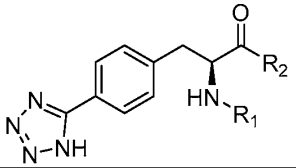
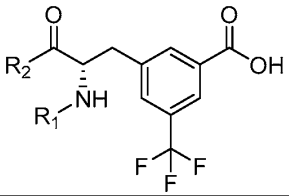
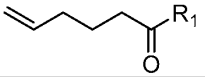
Compound / Bracket Moiety	Structure
[CCpCO2H]	
[CF3CO]	
[CH2CChCO2H]	
[CH2CCpCO2H]	
[CH2CH2CO2H]	
[CH2CMe2CO2H]	
[CH2CO2H]	
[CH2NMe2]	
[CH2Ppz]	
[CMe2CO2H]	
[CyPr]	
[Et]	
[EtSO2Ppz]	
[EtSSEt]	
[EtSSHex]	
[EtSSPh]	
[EtSSpy]	

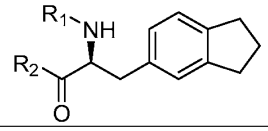
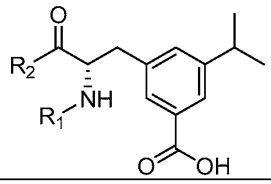
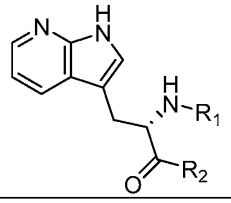
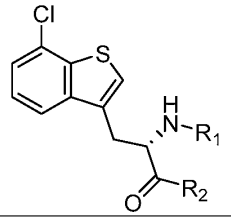
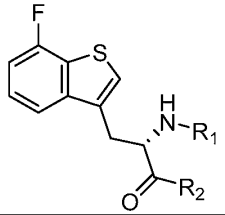
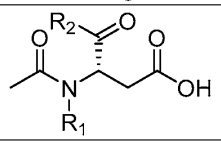
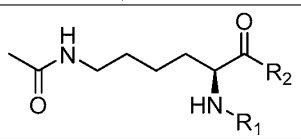
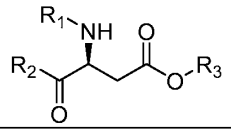
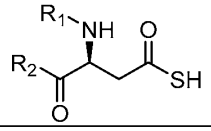
Compound / Bracket Moiety	Structure
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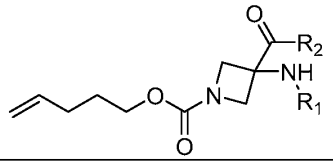
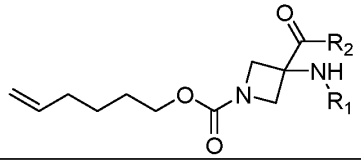
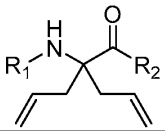
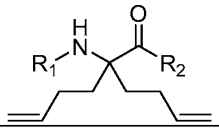
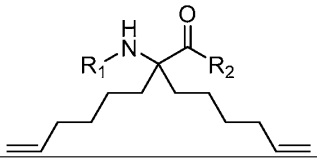
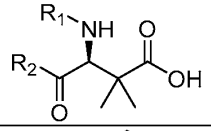
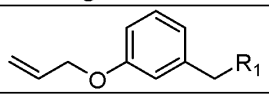
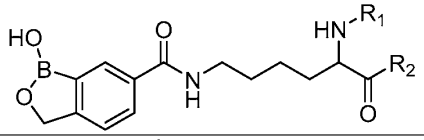
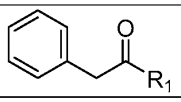
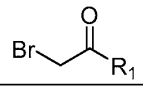
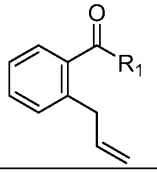
Compound / Bracket Moiety	Structure
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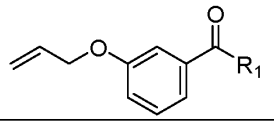
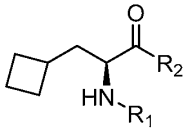
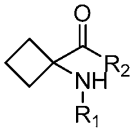
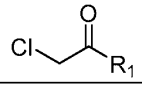
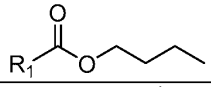
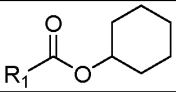
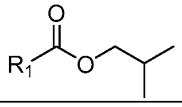
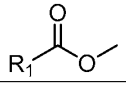
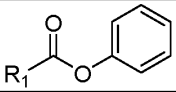
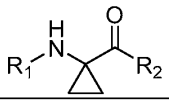
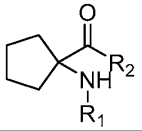
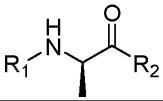
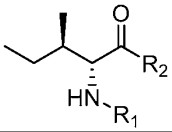
Compound / Bracket Moiety	Structure
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[RDMAPyr]	
[sBu]	
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[Tfb]	
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[Tfp]	
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2NH2F	
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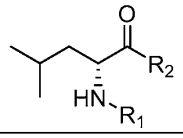
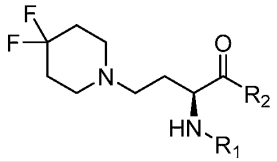
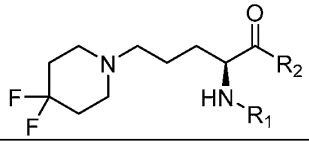
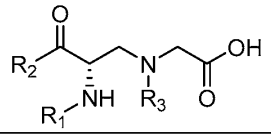
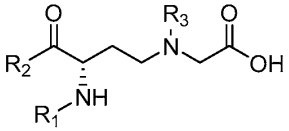
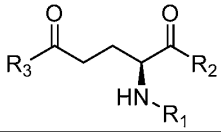
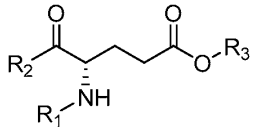
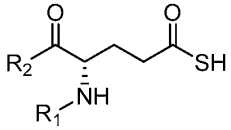
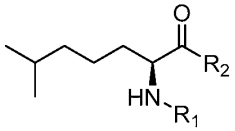
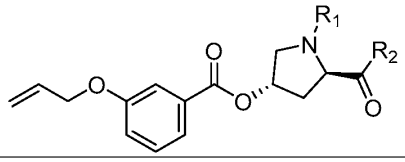
Compound / Bracket Moiety	Structure
3Br4FF	
3BrF	
3butenyl	
3CBMF	
3CH2NMe2F	
3CO2PhF	
3SF	
3SO2F	
3TzF	
4BrF	

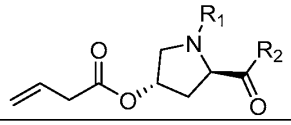
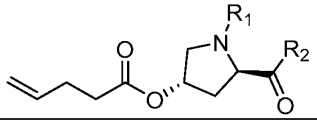
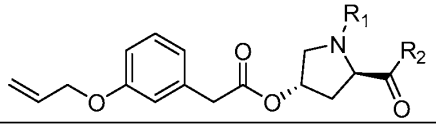
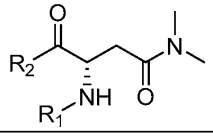
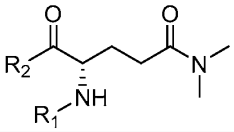
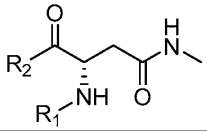
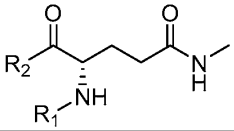
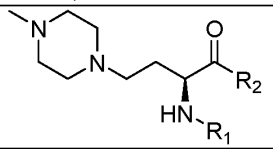
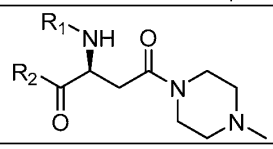
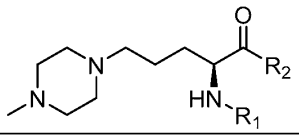
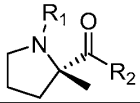
Compound / Bracket Moiety	Structure
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4ClW	
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4FW	
4pentenyl	
4SEF	
4TzF	
5F3Me3COOHF	
5hexenyl	

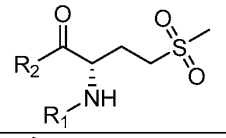
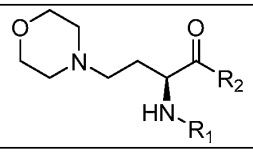
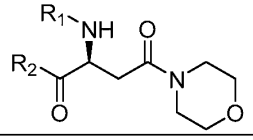
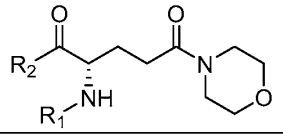
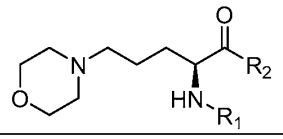
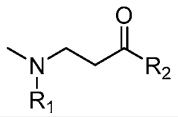
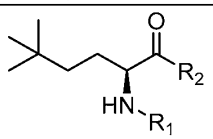
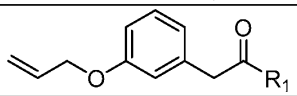
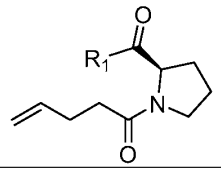
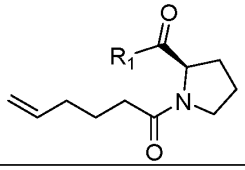
Compound / Bracket Moiety	Structure
5IndA	
5iPr3COOHF	
7AzaW	
7ClBztA	
7FBztA	
AcAsp	
AcLys	
AspE	
AspSH	

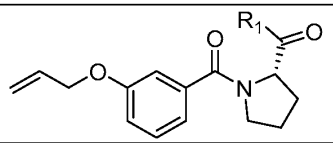
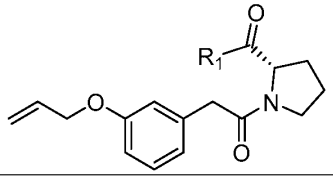
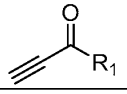
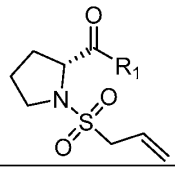
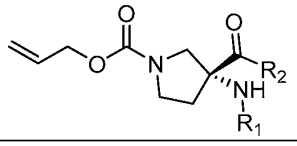
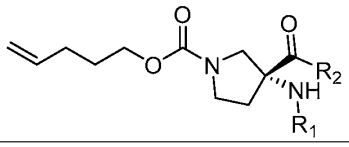
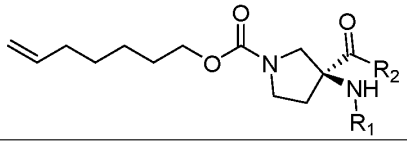
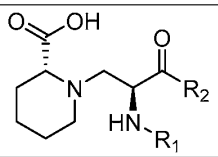
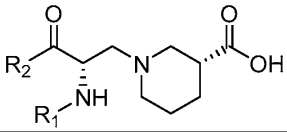
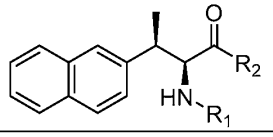
Compound / Bracket Moiety	Structure
Az2	
Az3	
B3	
B4	
B6	
bMe2Asp	
Bn3OAllyl	
BnBoroleK	
Bnc	
BrAc	
BzAm2Allyl	

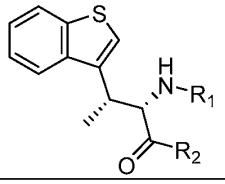
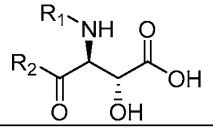
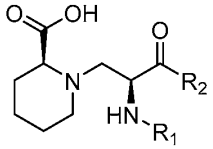
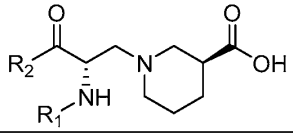
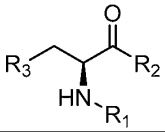
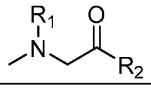
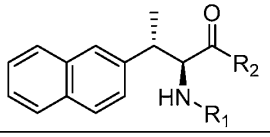
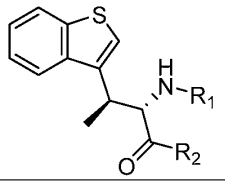
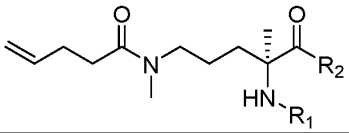
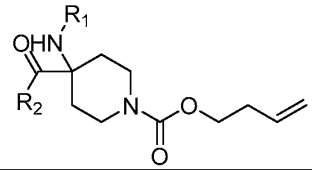
Compound / Bracket Moiety	Structure
BzAm3Oallyl	
Cba	
Cbg	
ClAc	
CO2Bu	
CO2Hex	
CO2iBu	
CO2Me	
CO2Ph	
Cpg	
CyLeu	
dAla	
dIle	

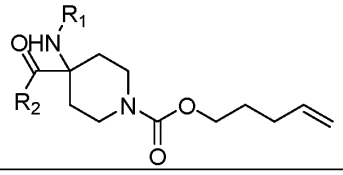
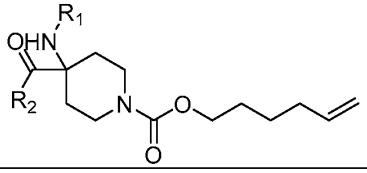
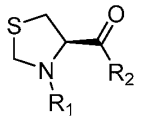
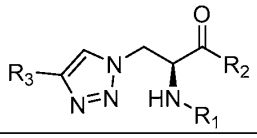
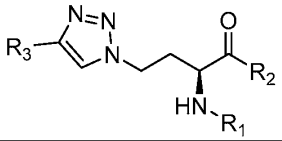
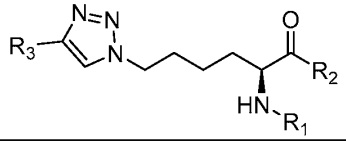
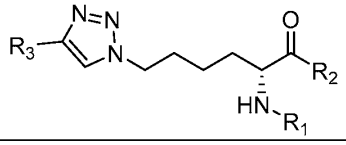
Compound / Bracket Moiety	Structure
dLeu	
F2PipAbu	
F2PipNva	
GA	
GAbu	
GlnR	
GluE	
GluSH	
hhLeu	
HypBzEs3OAllyl	

Compound / Bracket Moiety	Structure
HypEs4	
HypEs5	
HypPAc3OAllyl	
Me2Asn	
Me2Gln	
MeAsn	
MeGln	
MePpzAbu	
MePpzAsn	
MePpzNva	
MePro	

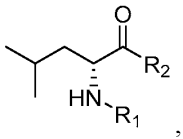
Compound / Bracket Moiety	Structure
Met2O	
MorphAbu	
MorphAsn	
MorphGln	
MorphNva	
NMebAla	
Npa	
PAc3OAllyl	
ProAm5	
ProAm6	

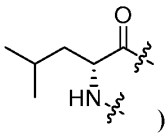
Compound / Bracket Moiety	Structure
ProBzAm3OAllyl	
ProPAc3OAllyl	
PropynOH	
ProSAm3	
PyrR	
PyrR2	
PyrS4	
R2COOPipA	
R3COOPipA	
RbMe2NapA	

Compound / Bracket Moiety	Structure
RbMeBztA	
RbOHAsp	
S2COOPipA	
S3COOPipA	
sAla	
Sar	
SbMe2NapA	
SbMeBztA	
SeNc5	
SPip1	

Compound / Bracket Moiety	Structure
SPip2	
SPip3	
ThioPro	
TriAzDap	
TriAzDab	
TriAzLys	
TriAzdLys	

[0639] In some embodiments, a compound has a structure selected from the table above, wherein R_1 is −OH. In some embodiments, a compound has a structure selected from the table above, wherein R_1 is an amino protection group, e.g., Fmoc, tBoc, etc. In some embodiments, a compound has a structure selected from the table above, wherein R_1 is an amino protecting group, e.g., Fmoc, tBoc, etc., and R_2 is −OH, or $-COR_2$ is an optionally substituted, protected or activated carboxyl group. In some embodiments, R_2 is −OH. In some embodiments, an amino acid residue has a structure selected from the table above, wherein each of R_1 and R_2 independently represents a connection site (e.g., for structure



, the residue is of the structure 

). In some embodiments, an agent, a peptide or a stapled peptide comprises such an amino acid residue.

[0640] In some embodiments, a peptide comprises one or more residues of amino acids selected from the Table above. In some embodiments, a peptide comprises one or more residues of TfeGA. In some embodiments, a peptide comprises one or more residues of 2COOHF. In some embodiments, a peptide comprises one or more residues of 3COOHF.

[0641] Among other things, the present disclosure provides peptides, including stapled peptides, comprising residues of amino acids described herein. In some embodiments, the present disclosure provides various methods comprising utilizing amino acids, optionally protected and/or activated, as described herein. In some embodiments, the present disclosure provides methods for preparing peptides, comprising utilizing amino acids, typically protected and/or activated, as described herein. For example, in some embodiments, various amino groups are Fmoc protected for peptide synthesis (particularly for forming backbone peptide bonds). In some embodiments, various side chain carboxylic acid groups are t-Bu protected (−C(O)−O−tBu).

[0642] In some embodiments, the present disclosure provides methods, comprising replacing one or more acidic amino acid residues, e.g., Asp, Glu, etc., in a first compound, each independently with a provided amino acid residue, e.g., TfeGA, 2COOHF, 3COOHF, etc., to provide a second compound. In some embodiments, each of the first and second compounds is independently or independently comprises a peptide. In some embodiments, a second compound provides improved properties and/or activities (e.g., lipophilicity, LogD, etc.) compared to a first compound. In some embodiments, a second compound provides, in addition to improved properties such as lipophilicity, one or more comparable or improved other properties and/or activities (e.g., solubility and/or target binding) compared to a first compound.

[0643] In some embodiments, an agent, e.g., a peptide, a stapled peptide, a stitched peptide, etc., is less than about 5000 Daltons in mass. In some embodiments, an agent is greater than or equal to about 900 Daltons and less than about 5000 Daltons in mass. In some embodiments, an agent is greater than or equal to about 1500 Daltons and less than about 5000 Daltons in mass. In some embodiments, an agent is greater than or equal to about 2000 Daltons and less than about 5000 Daltons in mass. In some embodiments, an agent is greater than or equal to about 2500 Daltons and less than about 5000 Daltons in mass. In some embodiments, an agent is greater than or equal to about 1000 Daltons and less than about 3000 Daltons in mass. In some embodiments, an agent is greater than or equal to about 1500 Daltons and less than about 3000 Daltons in mass. In some embodiments, an agent is greater than or equal to about

1500 Daltons and less than about 2500 Daltons in mass. In some embodiments, an agent is greater than or equal to about 1600 Daltons and less than about 2200 Daltons in mass. In some embodiments, the agent is no more than about 900 Daltons in mass. In some embodiments, an agent is no more than about 500 Daltons in mass. In some embodiments, an agent is no more than about 300 Daltons in mass. In some embodiments, an agent is no more than about 200 Daltons in mass.

Characterization

[0644] In some embodiments, agents, e.g., peptides, are characterized with respect to, for example, one or more characteristics such as binding characteristics – e.g., with respect to a particular target of interest (e.g., beta-catenin or a portion thereof), stability characteristics, for example in solution or in dried form, cell permeability characteristics, solubility, lipophilicity, etc.

[0645] In some embodiments, a binding characteristic may be or comprise specificity, affinity, on-rate, off-rate, etc, optionally under (or over a range of) specified conditions such as, for example, concentration, temperature, pH, cell type, presence or level of a particular competitor, etc.

[0646] As will be appreciated by those skilled in the art, assessments of characteristics as described herein may involve comparison with an appropriate reference (e.g., a positive or negative control) which may, in some embodiments, be a contemporaneous reference or, in some embodiments, a historical reference.

[0647] In some embodiments, desirable characteristics may be, for example: binding to a desired target (e.g., a dissociation constant (K_D) of at least less than about 1 μM, and preferably a K_D of less than about 50 nM); cell penetration (e.g., as measured by fluorescence-based assays or mass spectrometry of cellular fractions, etc.); solubility (e.g., soluble at less than about 1000 uM agent, or soluble at less than about 500 uM agent, or soluble at less than about 100 uM agent, or less than about 50 uM, or less than about 35 uM); activity (e.g., modulating one or more functions of a target, which may be assessed in a cellular reporter assay (e.g., with an IC50 of less than a concentration, e.g., less than about 1 μM, less than about 500 nM, less than about 50 nM, less than about 10 nM, etc.), an animal model (e.g., various animal models for conditions, disorders or diseases, e.g., mouse melanoma models *Braf*^{V600E}/*Pten*$^{-/-}$ and *Braf*^{V600E}/*Pten*$^{-/-}$/*CAT-STA*) and/or a subject; stability, which may be assessed using a number of assays (e.g., in a rat pharmacokinetic study (e.g., administered via oral, iv, ip, etc.) with a terminal half-life of greater than a suitable time, e.g., 1 hour); low toxicity, which might be assessed by a number of assays (e.g., a standard ADME/toxicity assays); and/or low levels of cytotoxicity (e.g., low levels of lactate dehydrogenase (LDH) released from cells when treated at a suitable concentration, e.g., about 10 μM of a peptide). In some embodiments, an agent of the invention comprises an affinity of less than about 10 nM, for example, an IC50 of 7 nM).

[0648] In some embodiments, provided agents can bind to targets, e.g., beta-catenin, with an EC 50 of no more than about 2000 nM. In some embodiments, an EC50 is no more than about 1500 nM. In some embodiments, an EC50 is no more than about 1000 nM. In some embodiments, an EC50 is no more than about 500 nM. In some embodiments, an EC50 is no more than about 300 nM. In some embodiments, an EC50 is no more than about 200 nM. In some embodiments, an EC50 is no more than about 100 nM. In some embodiments, an EC50 is no more than about 75 nM. In some embodiments, an EC50 is no more than about 50 nM. In some embodiments, an EC50 is no more than about 25 nM. In some embodiments, an EC50 is no more than about 10 nM. In some embodiments, an EC50 is no more than about 5 nM. In some embodiments, an EC50 is measured by fluorescence polarization as described in the Examples.

[0649] In some embodiments, the present disclosure provides agents, e.g., stapled peptides, with suitable solubility for various purposes. In some embodiments, solubility of provided agents, e.g., in PBS, is about or at least about 5-100 uM (e.g., about or at least about 5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, or 100 uM). In some embodiments, solubility is about or at least about 25 uM. In some embodiments, solubility is about or at least about 30 uM. In some embodiments, solubility is about or at least about 40 uM. In some embodiments, solubility is about or at least about 50 uM. In some embodiments, provided agents, e.g., stapled peptides, are protein bound in serum; in some embodiments, they are at least about 85%, 90%, or 95% protein bound in serum. In some embodiments, provided agents are over 95% protein bound in serum.

[0650] In some embodiments, provided agents can traverse a cell membrane of an animal cell. In some embodiments, provided agents can traverse a cell membrane of a human cell.

[0651] Among other things, provided agents can bind to motifs, residues, or polypeptides. In some embodiments, provided agents bind to beta-catenin. In some embodiments, a dissociation constant (K_D) is about 1 nM to about 1 uM. In some embodiments, a K_D is no more than about 1 uM. In some embodiments, a K_D is no more than about 500 nM. In some embodiments, a K_D is no more than about 250 nM. In some embodiments, a K_D is no more than about 100 nM. In some embodiments, a K_D is no more than about 50 nM. In some embodiments, a K_D is no more than about 25 nM. In some embodiments, a K_D is no more than about 10 nM. In some embodiments, a K_D is no more than about 5 nM. In some embodiments, a K_D is no more than about 1 nM. As appreciated by those skilled in the art, various technologies are available and can be utilized to measure K_D in accordance with the present disclosure. In some embodiments, K_D is measured by Surface Plasmon Resonance (SPR) as illustrated herein.

[0652] In some embodiments, provided agents binds to a polypeptide whose sequence is or comprising SEQ ID NO: 2, or a fragment thereof:

SVLFYAITTLHNLLLHQEGAKMAVRLAGGLQKMVALLNKTNVKFLAITTDCLQILAYGNQESKL IILASGGPQALVNIMRTYTYEKLLWTTSRVLKVLSVCSSNKPAIVEAGGMQALGLHLTDPSQRLV QNCLWTLRNLSDAATKQEGMEGLLGTLVQLLGSDDINVVTCAAGILSNLTCNNYKNKMMVCQ VGGIEALVRT (SEQ ID NO: 2).

[0653] In some embodiments, provided agents have one or more or all of the following interactions with beta-catenin:

Direct interactions (Italic), water mediated (bold), non-polar contacts underlined

LQILAY*G*NQES*K*LIILA (residue 301-317 of Uniprot P35222 sequence) (SEQ ID NO: 3)

SRVL*K*VLSVCSSN (residue 341-353 of Uniprot P35222 sequence) (SEQ ID NO: 4)

RLVQNCL*W*TLR*N*LSDA (residue 376-391 of Uniprot P35222 sequence) (SEQ ID NO: 5)

LGSDD*IN*VVTCAAGI (residue 409-423 of Uniprot P35222 sequence) (SEQ ID NO: 6)

[0654] In some embodiments, an agent, e.g., a peptide, binds to beta-catenin and interacts with one or more residues that are or correspond to at least two, or at least three, or at least four, or at least five, or at least six, or at least seven, or at least eight or at least nine, or at least ten, or at least eleven, or at least twelve, or at least thirteen, or at least fourteen, or at least fifteen, or at least sixteen, or at least seventeen, or at least eighteen, or at least nineteen, or at least twenty of the following amino acid residues in SEQ ID NO: 1 at the indicated positions: A305, Y306, G307, N308, Q309, K312, K345, V346, V349, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419. In some embodiments, an agent, e.g., a peptide, binds to beta-catenin and interacts with one or more residues that are or correspond to at least two, or at least three, or at least four, or at least five, or at least six, or seven of the following amino acid residues in SEQ ID NO: 1 at the indicated positions: G307, K312, K345, W383, R386, N387, D413, and N415. In some embodiments, an agent, e.g., a peptide, binds to beta-catenin and interacts with one or more residues that are or correspond to at least two, or at least three, or at least four, or at least five, or at least six, or seven of the following amino acid residues in SEQ ID NO: 1 at the indicated positions: G307, K312, K345, W383, N387, D413, and N415.

[0655] In some embodiments, provided agents interact with beta-catenin at one or more (e.g., 1, 2, 3, 4, 5, 6, or 7) of G307, K312, K345, W383, R386, N387, D413 and N415. In some embodiments, provided agents interact with beta-catenin at one or more (e.g., 1, 2, 3, 4, 5, 6, or 7) of G307, K312, K345, W383, N387, D413 and N415. In some embodiments, provided agents interact with beta-catenin at one or both of K312 and R386. In some embodiments, provided agents interact with G307. In some embodiments, provided agents interact with K312. In some embodiments, provided agents interact with beta-catenin at one or more of K345, W383, D413 and N415. In some embodiments, provided agents interact with beta-catenin at one or more of K345 and W383. In some embodiments, provided agents interact with beta-catenin at one or more of D413 and N415. In some embodiments, provided agents

interact with K312. In some embodiments, provided agents interact with K345. In some embodiments, provided agents interact with W383. In some embodiments, provided agents interact with R386. In some embodiments, provided agents interact with D413. In some embodiments, provided agents interact with N415.

[0656] In some embodiments, provided agents interact with one or more of amino acid residues that are or correspond to K312, R386, K345 and W383 of SEQ ID NO: 1. In some embodiments, provided agents interact with one or more of amino acid residues that are or correspond to K312 and R386 of SEQ ID NO: 1. In some embodiments, interaction with an amino acid residue can be assessed through mutation of such an amino acid residue (e.g., mutation of K, R, etc. to D, E, etc.).

[0657] As those skilled in the art reading the present disclosure will appreciate, in some embodiments, interactions with beta-catenin may be assessed by contacting an agent with either a full-length or a portion of beta-catenin. In some embodiments, a portion of beta-catenin comprises the interacting residues above. In some embodiments, a portion of beta-catenin is or comprises SEQ ID NO: 2. In some embodiments, a portion of beta-catenin is expressed with a tag (e.g., for purification, detection, etc.). In some embodiments, a tag is a fluorescent tag. In some embodiments, a tag is for detection. In some embodiments, a tag is for purification and detection. In some embodiments, a tag is a purification tag. In some embodiments, a tag is or comprises biotin. Many other types of tags are available in the art and can be utilized in accordance with the present disclosure.

[0658] Various technologies can be utilized for characterizing and/or assessing provided technologies (e.g., agents (e.g., various peptides), compositions, methods, etc.) in accordance with the present disclosure. As described herein, in some embodiments, a useful technology is or comprises fluorescence polarization. In some embodiments, a useful technology assesses LogP or LogD. In some embodiments, a useful technology is or comprises a CHI LogD assay. In some embodiments, a useful technology assesses solubility. In some embodiments, a useful technology is or comprises NanoBRET. In some embodiments, a useful technology is or comprises a reporter assay (e.g., DLD1 reporter assay). In some embodiments, a useful technology is or comprises alphascreen. Certain useful protocols are described in the Examples. Those skilled in the art appreciate that suitable adjustments may be made to such protocols, e.g., according to specific conditions, agents, purposes, etc.

Production

[0659] Various technologies are known in the art for producing provided agents. For example, various technologies for preparing small molecules, peptides (including stapled peptides) may be utilized in accordance with the present disclosure. Those skilled in the art, reading the present disclosure will well appreciate which such technologies are applicable in which aspects of the present disclosure in

accordance with the present disclosure.

[0660] In some embodiments, as described herein, certain stapled peptides, and in particular cysteine stapled peptides, may be provided in and/or produced by a biological system and reacting with a provided reagent, e.g., one having the structure of R^x–L^{s2}–R^x, or a salt thereof, wherein R^x can react with −SH groups under suitable conditions. In some embodiments, each R^x is a suitable leaving group. In some embodiments, each R^x is independently −Br.

[0661] In some embodiments, peptides are prepared on solid phase on a synthesizer using, typically, Fmoc chemistry. In some embodiments, the present disclosure provides protected and/or activated amino acids for synthesis.

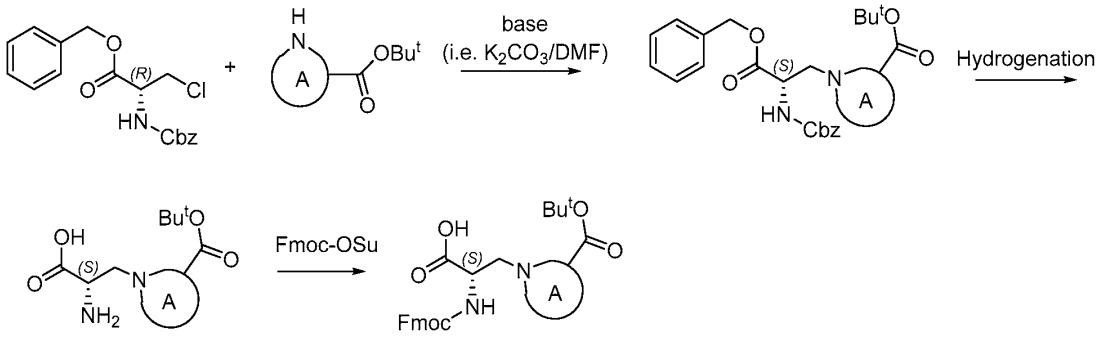
[0662] In some embodiments, staples are formed by olefin metathesis. In some embodiments, a product double bond of metathesis is reduced/hydrogenated. In some embodiments, CO_2 are extruded from a carbamate moiety of a staple. In some embodiments, provided stapled peptides are further modified, and/or conjugated to other entities. Conditions and/or reagents of these reactions are widely known in the art and can be performed in accordance with the present disclosure to provide stapled peptides.

[0663] Properties and/or activities of provided stapled peptides can be readily assessed in accordance with the present disclosure, for example, through use of one or more methods described in the examples.

[0664] In some embodiments, technologies for preparing and/or assessing provided stapled peptides include those described in US 9617309, US 2015-0225471, US 2016-0024153, US 2016-0215036, US2016-0244494, WO 2017/062518, *etc.*

[0665] In some embodiments, a provided compound, e.g., an amino acid or a protected form thereof, may be prepared utilizing the following technologies.

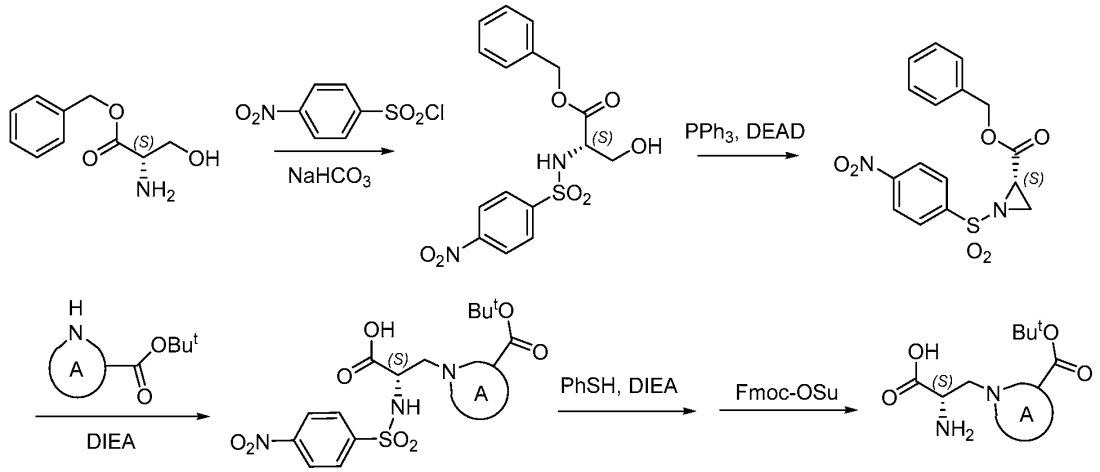
[0666] In some embodiments, a provide compound may be prepared using one or more or all steps described below:



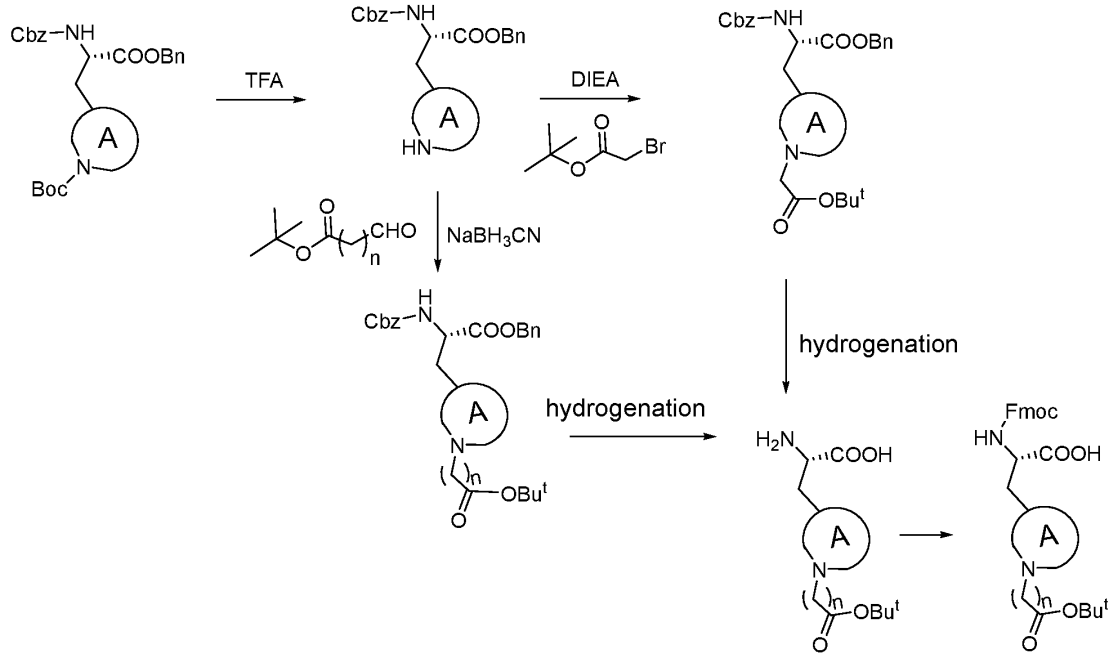
Those skilled in the art will appreciate that other leaving groups can be utilized in place of −Cl for the

first reaction, such as −Br, −I, −OTs, Oms, etc.

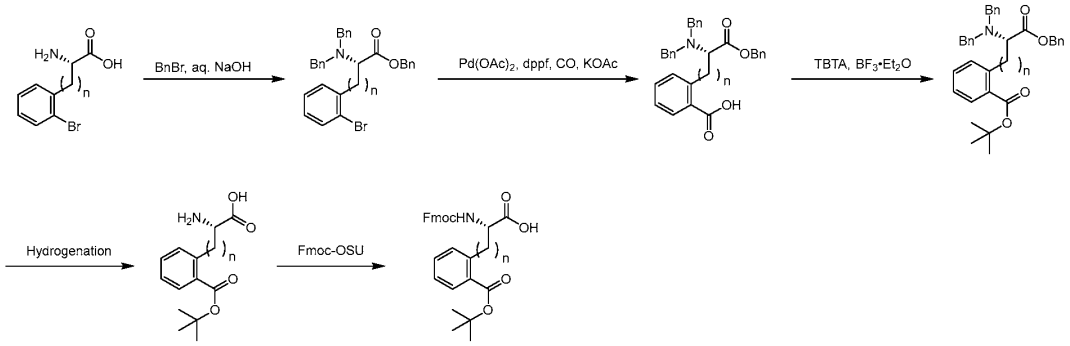
[0667] In some embodiments, a provide compound may be prepared using one or more or all steps described below:



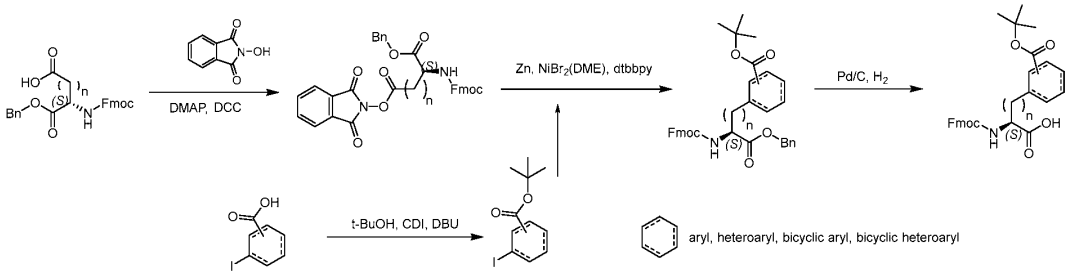
[0668] In some embodiments, a provide compound may be prepared using one or more or all steps described below:



[0669] In some embodiments, a provide compound may be prepared using one or more or all steps described below:



[0670] In some embodiments, a provide compound may be prepared using one or more or all steps described below:



[0671] Provided compounds can be provided in high purity. In some embodiments, a provided compound is at least about 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, or 99% pure. In some embodiments, provided compounds, e.g., amino acids optionally protected/activated, are essentially free of impurities, including stereoisomers.

Compositions

[0672] Among other things, the present disclosure provides compositions that comprise or otherwise relate to provided agents, e.g., small molecule agents, peptide agents (e.g., stapled peptides), as described herein.

[0673] In some embodiments, provided compositions are or comprise an assay system for characterizing (and optionally including) a stapled peptide as described herein.

[0674] In some embodiments, provided compositions are pharmaceutical compositions e.g., that comprise or deliver one or more provided agents.

[0675] In some embodiments, an agent is a peptide. In some embodiments, an agent is a stapled peptide. In some embodiments, an agent comprises a detectable moiety, e.g., fluorescent moiety, radioactive moiety, biotin, etc. In some embodiments, a detectable moiety is directly detectable. In some embodiments, a detectable antibody is detected indirectly, e.g., utilizing an antibody, an agent that can

reacting with a detectable moiety to form a detectable product, etc.

[0676] In some embodiments, a pharmaceutical composition comprises a provided agent and a pharmaceutically acceptable excipient (e.g., carrier).

[0677] In some embodiments, a peptide composition may include or deliver a particular form (e.g., a particular optical isomer, diastereomer, salt form, covalent conjugate form [e.g., covalently attached to a carrier moiety], etc., or combination thereof) of an agent as described herein). In some embodiments, an agent included or delivered by a pharmaceutical composition is described herein is not covalently linked to a carrier moiety.

[0678] In some embodiments, a provided therapeutic composition may comprise one or more additional therapeutic agents and/or one or more stabilizing agents and/or one or more agents that alters (e.g., extends or limits to a particular tissue, location or site) rate or extent of delivery over time.

[0679] In some embodiments, a composition is a pharmaceutical composition which comprises or delivers a provided agent (e.g., a stapled peptide) or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable excipient. In some embodiments, a composition comprises one and only stereoisomer of an agent (e.g., a stapled peptide) and/or one or more salts thereof. In some embodiments, a composition comprises two or more stereoisomers of an agent (e.g., a stapled peptide) and/or one or more salts thereof. In some embodiments, the two or more stereoisomers of an agent (e.g., a stapled peptide) or salts thereof elute as a single peak in a chromatography, e.g., HPLC.

Uses and Applications

[0680] Provided agents and compositions can be utilized for various purposes. For example, certain compounds may be utilized as amino acids, either directly or for preparation of other compounds such as peptides. Certain agents, e.g., peptides, may be utilized to prepare stapled peptides. Certain agents that are or comprise peptides, particularly stapled peptides, and compositions thereof, are biologically active and can be utilized for various purposes, e.g., as therapeutics toward various conditions, disorders or diseases, as tools for modulating biological functions, etc.

[0681] In some embodiments, the present disclosure provides agents and compositions thereof for modulating beta-catenin functions. In some instances, beta-catenin is reported to have multiple cellular functions including regulation and coordination of cell-cell adhesion and gene transcription. In some embodiments, agents described herein may inhibit beta-catenin activity and/or level and may, for example, inhibit neoplastic growth. In some embodiments, agents described herein may activate and/or increase level of beta-catenin and may, for example, be used to treat male pattern baldness or alopecia.

[0682] It is reported that beta-catenin can interact with members of the TCF/LEF family at a TCF site on beta-catenin. In some embodiments, provided technologies can decrease, suppress or block one or

more of such interactions. In some embodiments, the present disclosure provides methods for modulating an interaction between beta-catenin and its binding partner (e.g., a TCF/LEF family member) comprising contacting beta-catenin with a provided agent.

[0683] In some embodiments, binding of provided agents to beta-catenin competes or inhibits binding of another agent. In some embodiments, binding of provided agents to beta-catenin competes or inhibits binding of another agent. In some embodiments, binding of provided agents to beta-catenin competes or inhibits binding of TCF or a fragment thereof.

[0684] In some embodiments, provided agents compete with TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, APC, CDH1, or CDH2, or a fragment thereof, for beta-catenin binding.

[0685] In some embodiments, provided agents interfere with interactions of TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, APC, CDH1, or CDH2, or a fragment thereof, with beta-catenin.

[0686] In some embodiments, the present disclosure provides methods for modulating interactions of beta-catenin with a partner, e.g., TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, APC, CDH1, or CDH2, or a fragment thereof, comprising contacting beta-catenin with a provided agent or a composition that comprises or delivers a provided agent. In some embodiments, the present disclosure provides methods for modulating interactions of beta-catenin with a partner, e.g., TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, APC, CDH1, or CDH2, or a fragment thereof, comprising administering or delivering to a system comprising beta-catenin and the partner a provided agent or a composition that comprises or delivers a provided agent. In some embodiments, a system is an intro system. In some embodiments, a system is or comprises a cell, tissue or organ. In some embodiments, a system is a subject. In some embodiments, the present disclosure provides method for inhibiting cell growth, comprising administering or delivering to a population of cells an effective amount of a provided agent or a pharmaceutically acceptable salt thereof. In some embodiments, the present disclosure provides method for killing cells associated with a condition, disorder or disease (e.g., cancer), comprising administering or delivering to a population of such cells an effective amount of a provided agent or a pharmaceutically acceptable salt thereof.

[0687] In some embodiments, the present disclosure provides methods for preventing a condition, disorder or disease associated with beta-catenin (e.g., a cancer, a neurodegenerative disease, etc.), comprising administering or delivering to a subject susceptible thereto an effective amount of a provided agent or a pharmaceutically acceptable salt thereof. In some embodiments, the present disclosure provides methods for treating a condition, disorder or disease associated with beta-catenin (e.g., aberrant beta-catenin activity and/or expression level), comprising administering or delivering to a subject suffering therefrom an effective amount of a provided agent or a pharmaceutically acceptable salt thereof. In some embodiments, a provided agent is administered as a pharmaceutical composition that comprises or delivers an effective amount of a provided agent or a pharmaceutically acceptable salt thereof. In some

embodiments, a condition, disorder or disease is associated with beta-catenin interaction with a partner, e.g., TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, APC, CDH1, and/or CDH2. In some embodiments, a condition, disorder or disease is associated with beta-catenin with TCF. In some embodiments, a condition, disorder or disease is cancer. In some embodiments, provided agents may be administered in combination with another therapy, e.g., immunotherapy. In some embodiments, a condition, disorder, or disease is selected from cancer, cardiac disease, dilated cardiomyopathy, fetal alcohol syndrome, depression, and diabetes. In some embodiments, a condition, disorder, or disease is a heart condition, disorder, or disease. In some embodiments, a condition, disorder, or disease is cancer. In some embodiments a cancer is selected from: colon cancer, colorectal cancer, rectal cancer, prostate cancer familial adenomatous polyposis (FAP), Wilms Tumor, melanoma, hepatocellular carcinoma, ovarian cancer, endometrial cancer, medulloblastoma pilomatricomas, primary hetpatocellular carcinoma, ovarial carcinoma, breast cancer, lung cancer, glioblastoma, pliomatrixoma, medulloblastoma, thyroid tumors, and ovarian neoplasms. In some embodiments, a condition, disorder or disease is a cancer, e.g., colorectal cancer, hepatocellular cancer, melanoma, gastric cancer, bladder cancer, and endometrial cancer. In some embodiments, a cancer is colorectal cancer. In some embodiments, a cancer is hepatocellular cancer. In some embodiments, a cancer is prostate cancer. In some embodiments, a cancer is melanoma.

[0688] Various technologies can be utilized in accordance with the present disclosure to formulate, distribute, administer or deliver provided technologies such as agents, peptides, compounds, compositions, etc. For example, in some embodiments, administration may be ocular, oral, parenteral, topical, *etc.* In some particular embodiments, administration may be bronchial (*e.g.*, by bronchial instillation), buccal, dermal (which may be or comprise, for example, one or more of topical to the dermis, intradermal, interdermal, transdermal, *etc*), enteral, intra-arterial, intradermal, intragastric, intramedullary, intramuscular, intranasal, intraperitoneal, intrathecal, intravenous, intraventricular, within a specific organ (e. g., intrahepatic), mucosal, nasal, oral, rectal, subcutaneous, sublingual, topical, tracheal (*e.g.*, by intratracheal instillation), vaginal, vitreal, *etc.* In some embodiments, administration may involve dosing that is intermittent (*e.g.*, a plurality of doses separated in time) and/or periodic (*e.g.*, individual doses separated by a common period of time) dosing. In some embodiments, administration may involve continuous dosing (*e.g.*, perfusion) for at least a selected period of time. In some embodiments, provided technologies are administered intravenously.

[0689] Among other things, the present disclosure provides various structural moieties including designed amino acid residues that can be utilized to optimize various properties and activities, stability, delivery, pharmacodynamics, pharmacokinetics, etc. to provide various dosage forms, dosage regimen, therapeutic windows, etc. In some embodiments, provided agents and compositions thereof may be utilized with improved dosage regimen and/or unit doses. In some embodiments, administration of

provided agents are adjusted based on conditions, disorders or diseases and/or subpopulations. In some embodiments, administration and/or dosage regimen of provided technologies are adjusted according to certain biomarkers and genomic alterations.

[0690] Provided agents may deliver biological effects, e.g., therapeutic effects, via various mechanisms. In some embodiments, efficacy may be driven by AUC. In some embodiments, efficacy may be driven by Cmax.

[0691] In some embodiments, a provided agent is utilized in combination with another therapy. In some embodiments, a provided agent is utilized in combination with another therapeutic agent. In some embodiments, another therapy or therapeutic agent is administered prior to an administration or delivery of a provided agent. In some embodiments, another therapy or therapeutic agent is administered at about the same time as an administration or delivery of a provided agent. In some embodiments, a provided agent and another agent is in the same pharmaceutical composition. In some embodiments, another therapy or therapeutic agent is administered subsequently to an administration or delivery of a provided agent. In some embodiments, a subject is exposed to both a provided agent and another therapeutic agent. In some embodiments, both a provided agent and another agent can be detected in a subject. In some embodiments, a provided agent is administered before another agent is cleared out by a subject or vice versa. In some embodiments, a provided agent is administered within the half-life, or 2, 3, 4, 5 or 6 times of the half-life, of another agent or vice versa. In some embodiments, a subject is exposed to a therapeutic effect of a provided agent and a therapeutic effect of another therapeutic agent. In some embodiments, an agent may provide an effect after an agent is cleared out or metabolized by a subject. In some embodiments, a procedure, e.g., surgery, radiation, etc., may provide an effect after the procedure is completed.

[0692] In some embodiments, another therapy is a cancer therapy. In some embodiments, another therapy is or comprises surgery. In some embodiments, another therapy is or comprises radiation therapy. In some embodiments, another therapy is or comprises immunotherapy. In some embodiments, another therapeutic agent is or comprises a drug. In some embodiments, another therapeutic agent is or comprises a cancer drug. In some embodiments, another therapeutic agent is or comprises a chemotherapeutic agent. In some embodiments, another therapeutic agent is or comprises a hormone therapy agent. In some embodiments, another therapeutic agent is or comprises a kinase inhibitor. In some embodiments, another therapeutic agent is or comprises a checkpoint inhibitor (e.g., antibodies against PD1-, PD-L1, CTLA-4, etc.). In some embodiments, a provide agent can be administered with lower unit dose and/or total dose compared to being used alone. In some embodiments, another agent can be administered with lower unit dose and/or total dose compared to being used alone. In some embodiments, one or more side effects associated with administration of a provided agent and/or another therapy or therapeutic agent are

reduced. In some embodiments, a combination therapy provides improved results, e.g., when compared to each agent utilized individually. In some embodiments, a combination therapy achieves one or more better results, e.g., when compared to each agent utilized individually.

[0693] In some embodiments, another agent is a checkpoint inhibitor, an EGFR inhibitor, a VEGF inhibitor, a VEGFR inhibitor, a kinase inhibitor, or an anti-cancer drug.

[0694] In some embodiments, an additional agent is a checkpoint inhibitor. In some embodiments, an additional agent is an immune oncology agent. In some embodiments, an additional agent is an antibody against a checkpoint molecules. In some embodiments, an additional agent is an antibody of PD1, PDL-1, CTLA4, A2AR, B7-H3, B7-H4, BTLA, IDO, KIR, LAG3, TIM-s, C10orf54, *etc.* In some embodiments, an antibody is an anti-PD1 antibody. In some embodiments, an antibody is an anti-PD-L1 antibody. In some embodiments, an antibody is an anti-CTLA4.

[0695] In some embodiments, another agent is an EGFR inhibitor, *e.g.*, erlotinib, gefitinib, lapatinib, panitumumab, vandetanib, cetuximab, *etc.* In some embodiments, another agent is an VEGF and/or VEGFR inhibitor, *e.g.*, pazopanib, bevacizumab, sorafenib, sunitinib, axitinib, ponatinib, regorafenib, vandetanib, cabozantinib, ramucirumab, lenvatinib, ziv-aflibercept, *etc.* In some embodiments, another agent is a kinase inhibitor. In some embodiments, another therapeutic agent is a chemotherapeutic agent. In some embodiments, another therapeutic agent is an anti-cancer drug, *e.g.*, cyclophosphamide, methotrexate, 5-fluorouracil (5-FU), doxorubicin, mustine, vincristine, procarbazine, prednisolone, dacarbazine, bleomycin, etoposide, cisplatin, epirubicin, capecitabine, folinic acid, actinomycin, all-trans retinoic acid, azacitidine, azathioprine, bortezomib, carboplatin, chlorambucil, cytarabine, daunorubicin, docetaxel, doxifluridine, fluorouracil, gemcitabine, hydroxyurea, idarubicin, imatinib, irinotecan, mechlorethamine, mercaptopurine, mitoxantrone, paclitaxel, pemetrexed, teniposide, tioguanine, topotecan, valrubicin, vinblastine, vindesine, vinorelbine, oxaliplatin, *etc.*

[0696] Among other things, the present disclosure provides the following Embodiments:

1. A agent having the structure of formula I:

$$R^N–L^{P1}–L^{AA1}–L^{P2}–L^{AA2}–L^{P3}–L^{AA3}–L^{P4}–L^{AA4}–L^{P5}–L^{AA5}–L^{P6}–L^{AA6}–L^{P7}–R^C,$$

I

or a salt thereof, wherein:

R^N is a peptide, an amino protecting group or R'–L^{RN}–;

each of L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} is independently L, wherein L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} comprise:

a first R' group and a second R' group which are taken together to form –L^s– which is bonded to the atom to which a first R' group is attached and the atom to which a second R' group is attached; and

a third R' group and a fourth R' group which are taken together to form $-L^s-$ which is bonded to the atom to which a third R' group is attached and the atom to which a fourth R' group is attached;

each L^s is independently $-L^{s1}-L^{s2}-L^{s3}-$, wherein each L^{s1}, L^{s2} and L^{s3} is independently L;

L^{AA1} is an amino acid residue that comprises a side chain comprising an acidic or polar group;

L^{AA2} is an amino acid residue that comprises a side chain comprising an acidic or polar group;

L^{AA3} is an amino acid residue;

L^{AA4} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

L^{AA5} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

L^{AA6} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

R^C is a peptide, a carboxyl protecting group, $-L^{RC}-R'$, $-O-L^{RC}-R'$ or $-N(R')-L^{RC}-R'$;

each of L^{RN} and L^{RC} is independently L;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each $-Cy-$ is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently $-L-R$, $-C(O)R$, $-CO_2R$, or $-SO_2R$;

each R is independently $-H$, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

2. A agent having the structure of formula I:

$$R^N–L^{P1}–L^{AA1}–L^{P2}–L^{AA2}–L^{P3}–L^{AA3}–L^{P4}–L^{AA4}–L^{P5}–L^{AA5}–L^{P6}–L^{AA6}–L^{P7}–R^C,$$

I

or a salt thereof, wherein:

R^N is a peptide, an amino protecting group or R'–L^{RN}–;

each of L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} is independently L, wherein L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} comprise:

a first R' group and a second R' group which are taken together to form –L^s– which is bonded to the atom to which a first R' group is attached and the atom to which a second R' group is attached; and

a third R' group and a fourth R' group which are taken together to form –L^s– which is bonded to the atom to which a third R' group is attached and the atom to which a fourth R' group is attached;

each L^s is independently –L^{s1}–L^{s2}–L^{s3}–, wherein each L^{s1}, L^{s2} and L^{s3} is independently L;

L^{AA1} is L^{AR}, wherein a methylene unit is replaced with –C(R')(R^{AS})–, wherein R^{AS} is –L^{AS1}–R^{AA1}, wherein R^{AA1} is –CO_2R or –SO_2R;

L^{AA2} is L^{AR}, wherein a methylene unit is replaced with –C(R')(R^{AS})–, wherein R^{AS} is –L^{AS2}–R^{AA2}, wherein R^{AA2} is –CO_2R, or –SO_2R;

L^{AA3} is L^{AR}, wherein a methylene unit is replaced with –C(R')(R^{AS})–, wherein R^{AS} is –L^{AS3}–R^{AA3}, wherein R^{AA3} is R';

L^{AA4} is L^{AR}, wherein a methylene unit is replaced with –C(R')(R^{AS})–, wherein R^{AS} is –L^{AS4}–R^{AA4}, wherein R^{AA4} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

L^{AA5} is L^{AR}, wherein a methylene unit is replaced with –C(R')(R^{AS})–, wherein R^{AS} is –L^{AS5}–R^{AA5}, wherein R^{AA5} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

L^{AA6} is L^{AR}, wherein a methylene unit is replaced with –C(R')(R^{AS})–, wherein R^{AS} is –L^{AS6}–R^{AA6}, wherein R^{AA6} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

R^C is a peptide, a carboxyl protecting group, –L^{RC}–R', –O–L^{RC}–R' or –N(R')–L^{RC}–R';

each of L^{RN} and L^{RC} is independently L;

each L^{AR} is independently an optionally substituted, bivalent C_1-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with –C(R')$_2$–,

−C(R')(R^{AS})−,−Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−;

each of L^{AS1}, L^{AS2}, L^{AS3}, L^{AS4}, L^{AS5}, and L^{AS6} is independently L^{AS};

each R^{AS} is independently $-L^{AS}-R'$;

each L^{AS} is independently a covalent bond or an optionally substituted, bivalent C_1-C_{10} aliphatic or heteroaliphatic group having 1-5 heteroatoms, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −L−R, −C(O)R, $-CO_2R$, or $-SO_2R$;

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

3. The agent of any one of the preceding Embodiments, wherein a second R' group and a third R' group are attached to the same atom.

4. The agent of any one of the preceding Embodiments, wherein each of the first, second and fourth R' groups is independently attached to a different atom.

5. The agent of any one of the preceding Embodiments, wherein L^s formed by taking the first and the second R' groups together is a staple as described herein.

6. The agent of any one of the preceding Embodiments, wherein L^s formed by taking the first and the second R' groups together has a length of 5-20 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms.

7. The agent of any one of the preceding Embodiments, wherein L^s formed by taking the third and the fourth R' groups together is a staple as described herein.

8. The agent of any one of the preceding Embodiments, wherein L^s formed by taking the third and the fourth R' groups together has a length of 5-20 (e.g., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms.

9. The agent of any one of the preceding Embodiments, wherein L^s formed by taking the third and the fourth R' groups together has a length of 10-20 (e.g., 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms.

10. The agent of any one of the preceding Embodiments, wherein L^{P1} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

11. The agent of any one of the preceding Embodiments, wherein the length of L^{P1} is 2-10 (2, 3, 4, 5, 6, 7, 8, 9, or 10) atoms.

12. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P1} are independently replaced with $-N(R')-$ or $-C(O)-$.

13. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P1} are independently replaced with $-N(R')-$ or $-C(O)N(R')-$.

14. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P1} are independently replaced with $-N(R')-$, $-C(R')_2$, or $-C(O)N(R')-$.

15. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{p1} are independently replaced with $-N(R')-$, and one or more methylene units of L^{p1} are independently replaced with $-C(O)N(R')-$.

16. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{P1} is replaced with $-C(R')_2-$, wherein one of the R' groups is a first R' group of the four R' groups, or a methylene unit of L^{P1} is replaced with $-N(R')-$, wherein the R' group is a first R' group of the four R' groups.

17. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{P1} is replaced with $-C(R')_2-$, wherein one of the R' groups is a first R' group of the four R' groups.

18. The agent of any one of the preceding Embodiments, wherein L^{P1} is or comprises $-[X]_p-X^1-$, wherein each X and X^1 is independently an amino acid residue, wherein p is 0-10, and X^1 is bonded to L^{AA1}.

19. The agent of any one of the preceding Embodiments, wherein L^{P1} is or comprises $-X^1-$.

20. The agent of any one of the preceding Embodiments, wherein X^1 comprises the first R' group of the four R' groups.

21. The agent of any one of the preceding Embodiments, wherein L^{AA1} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

22. The agent of any one of the preceding Embodiments, wherein L^{AA1} is $-N(R')-C(R')(R^{AS})-C(O)-$.

23. The agent of any one of the preceding Embodiments, wherein L^{AA1} is $-NH-C(R')(R^{AS})-C(O)-$.

24. The agent of any one of the preceding Embodiments, wherein L^{AS1} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

25. The agent of any one of the preceding Embodiments, wherein L^{AS1} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-S(O)-$, or $-S(O)_2-$.

26. The agent of any one of the preceding Embodiments, wherein L^{AS1} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-O-$, $-S-$, or $-N(R')-$.

27. The agent of any one of the preceding Embodiments, wherein L^{AS1} is an optionally substituted, bivalent C_1-C_{10} alkylene group.

28. The agent of any one of the preceding Embodiments, wherein L^{AS1} is optionally substituted $-CH_2-$.

29. The agent of any one of the preceding Embodiments, wherein L^{AS1} is $-CH_2-$.

30. The agent of any one of the preceding Embodiments, wherein R^{AA1} is $-CO_2R$.

31. The agent of any one of the preceding Embodiments, wherein R^{AA1} is $-CO_2H$.

32. The agent of any one of the preceding Embodiments, wherein L^{AA1} is an amino acid residue that comprises a side chain comprising an acidic group.

33. The agent of any one of the preceding Embodiments, wherein L^{AA1} is X^2.

34. The agent of any one of the preceding Embodiments, wherein L^{P2} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

35. The agent of any one of the preceding Embodiments, wherein the length of L^{P2} is 2-10 (2, 3, 4, 5, 6, 7, 8, 9, or 10) atoms.

36. The agent of any one of the preceding Embodiments, wherein the length of L^{P2} is 6 atoms.

37. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P2} are independently replaced with $-N(R')-$ or $-C(O)-$.

38. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P2} are independently replaced with $-N(R')-$ or $-C(O)N(R')-$.

39. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P2} are independently replaced with $-N(R')-$, $-C(R')_2$, or $-C(O)N(R')-$.

40. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P2} are independently replaced with $-N(R')-$, and one or more methylene units of L^{P2} are independently replaced with $-C(O)N(R')-$.

41. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{P2} is replaced with $-C(R')_2-$, wherein one of the R' groups is the second R' group and the other is the third R' group of the four R' groups.

42. The agent of any one of the preceding Embodiments, wherein L^{P2} is or comprises $-[X]pX^4[X]p'-$, wherein each X and X^4 is independently an amino acid residue, and each of p and p' is independently 0-10.

43. The agent of any one of the preceding Embodiments, wherein L^{P2} is or comprises $-[X]pX^3X^4[X]p'-$, wherein each X and X^4 is independently an amino acid residue, and each of p and p' is independently 0-10.

44. The agent of any one of the preceding Embodiments, wherein L^{P2} is or comprises $-X^3X^4-$, wherein each X^3 and X^4 is independently an amino acid residue, and X^4 is bonded to L^{AA2}.

45. The agent of any one of the preceding Embodiments, wherein X^4 comprises $-C(R')_2-$, wherein one of the R' groups is the second R' group and the other is the third R' group of the four R' groups.

46. The agent of any one of the preceding Embodiments, wherein L^s formed by taking the first and the second R' groups together has the structure of a L^s group bonded to X^1 and X^4 as described herein.

47. The agent of any one of the preceding Embodiments, wherein L^s formed by taking the third and the fourth R' groups together has the structure of a L^s group bonded to X^4 and X^{11} as described herein.

48. The agent of any one of the preceding Embodiments, wherein L^{AA2} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

49. The agent of any one of the preceding Embodiments, wherein L^{AA2} is $-N(R')-C(R')(R^{AS})-C(O)-$.

50. The agent of any one of the preceding Embodiments, wherein L^{AA2} is $-NH-C(R')(R^{AS})-C(O)-$.

51. The agent of any one of the preceding Embodiments, wherein L^{AS2} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

52. The agent of any one of the preceding Embodiments, wherein L^{AS2} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-S(O)-$, or $-S(O)_2-$.

53. The agent of any one of the preceding Embodiments, wherein L^{AS2} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-O-$, $-S-$, or $-N(R')-$.

54. The agent of any one of the preceding Embodiments, wherein L^{AS2} is an optionally substituted, bivalent C_1-C_{10} alkylene group.

55. The agent of any one of the preceding Embodiments, wherein L^{AS2} is optionally substituted $-CH_2-$.

56. The agent of any one of the preceding Embodiments, wherein L^{AS2} is $-CH_2-$.

57. The agent of any one of the preceding Embodiments, wherein R^{AA2} is $-CO_2R$.

58. The agent of any one of the preceding Embodiments, wherein R^{AA2} is $-CO_2H$.

59. The agent of any one of the preceding Embodiments, wherein L^{AA2} is an amino acid residue that comprises a side chain comprising an acidic group.

60. The agent of any one of the preceding Embodiments, wherein L^{AA2} is X^5.

61. The agent of any one of the preceding Embodiments, wherein the length of L^{P3} is 0-10 (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10) atoms.

62. The agent of any one of the preceding Embodiments, wherein L^{P3} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

63. The agent of any one of the preceding Embodiments, wherein the length of L^{P3} is 0-10 (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10) atoms.

64. The agent of any one of the preceding Embodiments, wherein L^{P3} is a covalent bond.

65. The agent of any one of the preceding Embodiments, wherein L^{AA3} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

66. The agent of any one of the preceding Embodiments, wherein L^{AA3} is $-N(R')-C(R')(R^{AS})-C(O)-$.

67. The agent of any one of the preceding Embodiments, wherein L^{AA3} is $-NH-C(R')(R^{AS})-C(O)-$.

68. The agent of any one of the preceding Embodiments, L^{AS3} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

69. The agent of any one of the preceding Embodiments, wherein R^{AS} is $-L^{AS}-R^{AA3}$, wherein L^{AS3} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-S(O)-$, or $-S(O)_2-$.

70. The agent of any one of the preceding Embodiments, wherein L^{AS3} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-O-$, $-S-$, or $-N(R')-$.

71. The agent of any one of the preceding Embodiments, wherein L^{AS3} is an optionally substituted, bivalent C_1-C_{10} alkylene group.

72. The agent of any one of the preceding Embodiments, wherein L^{AS3} is optionally substituted $-CH_2-$.

73. The agent of any one of the preceding Embodiments, wherein L^{AS3} is $-CH_2-$.

74. The agent of any one of the preceding Embodiments, wherein R^{AA3} is $-CO_2R$.

75. The agent of any one of the preceding Embodiments, wherein R^{AA3} is $-CO_2H$.

76. The agent of any one of the preceding Embodiments, wherein L^{AA3} is an amino acid residue that comprises a side chain comprising an acidic group.

77. The agent of any one of the preceding Embodiments, wherein L^{AA3} is X^6.

78. The agent of any one of the preceding Embodiments, wherein L^{P4} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

79. The agent of any one of the preceding Embodiments, wherein the length of L^{P4} is 2-10 (2, 3, 4, 5, 6, 7, 8, 9, or 10) atoms.

80. The agent of any one of the preceding Embodiments, wherein the length of L^{P4} is 6 atoms.

81. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P4} are independently replaced with $-N(R')-$ or $-C(O)-$.

82. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P4} are independently replaced with $-N(R')-$ or $-C(O)N(R')-$.

83. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P4} are independently replaced with $-N(R')-$, $-C(R')_2$, or $-C(O)N(R')-$.

84. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P4} are independently replaced with $-N(R')-$, and one or more methylene units of L^{P4} are independently replaced with $-C(O)N(R')-$.

85. The agent of any one of the preceding Embodiments, wherein L^{P4} is or comprises $-[X]pX^7X^8[X]p'-$, wherein each X and X^{11} is independently an amino acid residue, and each of p and p' is independently 0-10.

86. The agent of any one of the preceding Embodiments, wherein L^{P4} is or comprises $-X^7X^8-$, wherein each X^7 and X^8 is independently an amino acid residue, and X^8 is bonded to L^{AA4}.

87. The agent of any one of the preceding Embodiments, wherein L^{AA4} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

88. The agent of any one of the preceding Embodiments, wherein L^{AA4} is $-N(R')-C(R')(R^{AS})-C(O)-$.

89. The agent of any one of the preceding Embodiments, wherein L^{AA4} is $-NH-C(R')(R^{AS})-C(O)-$.

90. The agent of any one of the preceding Embodiments, wherein L^{AS4} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

91. The agent of any one of the preceding Embodiments, wherein L^{AS4} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-S(O)-$, or $-S(O)_2-$.

92. The agent of any one of the preceding Embodiments, L^{AS4} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-O-$, $-S-$, or $-N(R')-$.

93. The agent of any one of the preceding Embodiments, wherein L^{AS4} is an optionally substituted, bivalent C_1-C_{10} alkylene group.

94. The agent of any one of the preceding Embodiments, wherein L^{AS4} is optionally substituted $-CH_2-$.

95. The agent of any one of the preceding Embodiments, wherein L^{AS4} is $-CH_2-$.

96. The agent of any one of the preceding Embodiments, wherein R^{AA4} is optionally substituted 6-14 membered aryl.

97. The agent of any one of the preceding Embodiments, wherein R^{AA4} is optionally substituted phenyl.

98. The agent of any one of the preceding Embodiments, wherein R^{AA4} is phenyl.

99. The agent of any one of Embodiments 1-95, wherein R^{AA4} is optionally substituted 5-14 membered heteroaryl having 1-6 heteroatoms.

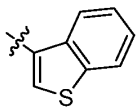
100. The agent of any one of Embodiments 1-95, wherein R^{AA4} is optionally substituted 5-membered monocyclic heteroaryl having 1-4 heteroatoms.

101. The agent of any one of Embodiments 1-95, wherein R^{AA4} is optionally substituted 

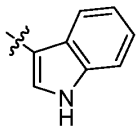
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102. The agent of any one of Embodiments 1-95, wherein R^{AA4} is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms.

103. The agent of any one of Embodiments 1-95, wherein R^{AA4} is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms.

104. The agent of any one of Embodiments 1-95, wherein R^{AA4} is optionally substituted 

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105. The agent of any one of Embodiments 1-95, wherein R^{AA4} is optionally substituted .

106. The agent of any one of the preceding Embodiments, wherein L^{AA4} is an amino acid residue.

107. The agent of any one of the preceding Embodiments, wherein L^{AA4} is X^9.

108. The agent of any one of the preceding Embodiments, wherein L^{P5} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

109. The agent of any one of the preceding Embodiments, wherein the length of L^{P5} is 2-10 (2, 3, 4, 5, 6, 7, 8, 9, or 10) atoms.

110. The agent of any one of the preceding Embodiments, wherein the length of L^{P5} is 6 atoms.

111. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P5} are independently replaced with $-N(R')-$ or $-C(O)-$.

112. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P5} are independently replaced with $-N(R')-$ or $-C(O)N(R')-$.

113. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P5} are independently replaced with $-N(R')-$, $-C(R')_2$, or $-C(O)N(R')-$.

114. The agent of any one of the preceding Embodiments, wherein one or more methylene units of L^{P5} are independently replaced with $-N(R')-$, and one or more methylene units of L^{P5} are independently replaced with $-C(O)N(R')-$.

115. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{P5} is replaced with $-C(R')_2-$, wherein one of the R' groups is the fourth R' group.

116. The agent of any one of the preceding Embodiments, wherein L^{P5} is or comprises $-[X]pX^{11}[X]p'-$, wherein each X and X^{11} is independently an amino acid residue, and each of p and p' is independently 0-10.

117. The agent of any one of the preceding Embodiments, wherein L^{P5} is or comprises $-X^{10}X^{11}-$, wherein each X^{10} and X^{11} is independently an amino acid residue, and X^{11} is bonded to L^{AA5}.

118. The agent of any one of the preceding Embodiments, wherein X^{11} comprises $-C(R')_2-$, wherein one of the R' groups is the fourth R' group.

119. The agent of any one of the preceding Embodiments, wherein L^{AA5} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$,

−C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −$S(O)_2$−, −$S(O)_2$N(R')−, −C(O)S−, or −C(O)O−.

120. The agent of any one of the preceding Embodiments, wherein L^{AA5} is −N(R')−C(R')(R^{AS})−C(O)−.

121. The agent of any one of the preceding Embodiments, wherein L^{AA5} is −NH−C(R')(R^{AS})−C(O)−.

122. The agent of any one of the preceding Embodiments, wherein L^{AS5} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with −$C(R')_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −$S(O)_2$−, −$S(O)_2$N(R')−, −C(O)S−, or −C(O)O−.

123. The agent of any one of the preceding Embodiments, wherein L^{AS5} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with −$C(R')_2$−, −Cy−, −O−, −S−, −N(R')−, −C(O)−, −S(O)−, or −$S(O)_2$−.

124. The agent of any one of the preceding Embodiments, wherein L^{AS5} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with −O−, −S−, or −N(R')−.

125. The agent of any one of the preceding Embodiments, wherein L^{AS5} is an optionally substituted, bivalent C_1-C_{10} alkylene group.

126. The agent of any one of the preceding Embodiments, wherein L^{AS5} is optionally substituted −CH_2−.

127. The agent of any one of the preceding Embodiments, wherein L^{AS5} is −CH_2−.

128. The agent of any one of the preceding Embodiments, wherein R^{AA5} is optionally substituted 6-14 membered aryl.

129. The agent of any one of the preceding Embodiments, wherein R^{AA5} is optionally substituted phenyl.

130. The agent of any one of the preceding Embodiments, wherein R^{AA5} is phenyl.

131. The agent of any one of Embodiments 1-95, wherein R^{AA5} is optionally substituted 5-14 membered heteroaryl having 1-6 heteroatoms.

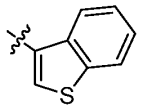
132. The agent of any one of Embodiments 1-95, wherein R^{AA5} is optionally substituted 5-membered monocyclic heteroaryl having 1-4 heteroatoms.

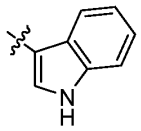
133. The agent of any one of Embodiments 1-95, wherein R^{AA5} is optionally substituted 

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134. The agent of any one of Embodiments 1-95, wherein R^{AA5} is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms.

135. The agent of any one of Embodiments 1-95, wherein R^{AA5} is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms.

136. The agent of any one of Embodiments 1-95, wherein R^{AA5} is optionally substituted  .

137. The agent of any one of Embodiments 1-95, wherein R^{AA5} is optionally substituted  .

138. The agent of any one of the preceding Embodiments, wherein L^{AA5} is an amino acid residue.

139. The agent of any one of the preceding Embodiments, wherein L^{AA5} is X^{12}.

140. The agent of any one of the preceding Embodiments, wherein L^{P6} is a covalent bond, or an optionally substituted, bivalent C_2-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

141. The agent of any one of the preceding Embodiments, wherein the length of L^{P6} is 0-10 (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10) atoms.

142. The agent of any one of the preceding Embodiments, wherein the length of L^{P6} is a covalent bond.

143. The agent of any one of the preceding Embodiments, wherein L^{AA6} is an optionally substituted, bivalent C_2-C_4 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

144. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{AA6} is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS}-R^{AA6}$, wherein L^{AS} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

145. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{AA6} is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS}-R^{AA6}$, wherein L^{AS} is an optionally substituted, bivalent

C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-S(O)-$, or $-S(O)_2-$.

146. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{AA6} is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS}-R^{AA6}$, wherein L^{AS} is an optionally substituted, bivalent C_1-C_{10} aliphatic group, wherein one or more methylene units of the group optionally and independently replaced with $-O-$, $-S-$, or $-N(R')-$.

147. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{AA6} is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS}-R^{AA6}$, wherein L^{AS} is an optionally substituted, bivalent C_1-C_{10} alkylene group.

148. The agent of any one of the preceding Embodiments, wherein a methylene unit of L^{AA6} is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-CH_2-R^{AA6}$.

149. The agent of any one of the preceding Embodiments, wherein R^{AA6} is optionally substituted 6-14 membered aryl.

150. The agent of any one of the preceding Embodiments, wherein R^{AA6} is optionally substituted phenyl.

151. The agent of any one of the preceding Embodiments, wherein R^{AA6} is phenyl.

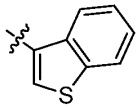
152. The agent of any one of Embodiments 1-95, wherein R^{AA6} is optionally substituted 5-14 membered heteroaryl having 1-6 heteroatoms.

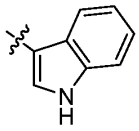
153. The agent of any one of Embodiments 1-95, wherein R^{AA6} is optionally substituted 5-membered monocyclic heteroaryl having 1-4 heteroatoms.

154. The agent of any one of Embodiments 1-95, wherein R^{AA6} is optionally substituted  .

155. The agent of any one of Embodiments 1-95, wherein R^{AA6} is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms.

156. The agent of any one of Embodiments 1-95, wherein R^{AA6} is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms.

157. The agent of any one of Embodiments 1-95, wherein R^{AA6} is optionally substituted  .

158. The agent of any one of Embodiments 1-95, wherein R^{AA6} is optionally substituted  .

159. The agent of any one of the preceding Embodiments, wherein L^{AA6} is an amino acid residue.

160. The agent of any one of the preceding Embodiments, wherein L^{AA6} is X^{13}.

161. The agent of any one of the preceding Embodiments, wherein L^{P7} is a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−.

162. The agent of any one of the preceding Embodiments, wherein the length of L^{P7} is 0-20 (e.g., 0-15, 0-10, 0-5, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms.

163. The agent of any one of the preceding Embodiments, wherein L^{RN} is a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−.

164. The agent of any one of the preceding Embodiments, wherein the length of L^{RN} is 0-20 (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms.

165. The agent of any one of the preceding Embodiments, wherein R^N is R'−L^{RN}−, wherein R' is −C(O)R, −CO$_2$R, or −SO$_2$R.

166. The agent of any one of the preceding Embodiments, wherein R^N is R', wherein R' is −C(O)R, −CO$_2$R, or −SO$_2$R.

167. The agent of any one of the preceding Embodiments, wherein L^{RC} is a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−.

168. The agent of any one of the preceding Embodiments, wherein the length of L^{RC} is 0-20 (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20) atoms.

169. The agent of any one of the preceding Embodiments, wherein R^C is −O−L^{RC}−R' or −N(R')−L^{RC}−R'.

170. The agent of any one of the preceding Embodiments, wherein R^C is −OR' or −N(R')$_2$, wherein each R' is independently R.

171. The agent of any one of the preceding Embodiments, wherein the agent is or comprise a peptide.

172. The agent of any one of the preceding Embodiments, wherein the agent is a peptide.

173. The agent of any one of the preceding Embodiments, wherein the agent is or comprises a helix structure.

174. An agent, wherein the agent is or comprise a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group; and

X^{13} comprises a side chain comprising an optionally substituted aromatic group.

175. An agent, wherein the agent is or comprises:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1, and each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue.

176. An agent, wherein the agent is or comprises:

$$[X]_pX^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}X^{14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}[X]_{p'},$$

wherein:

each of p15, p16 and p17 is independently 0 or 1;

each of p and p' is independently 0-10;

each of X, X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue.

177. An agent, wherein the agent is or comprise a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or are stapled, or X^3 and X^{10} are independently amino acid residues suitable for stapling, or are stapled.

178. The agent of Embodiment 174, wherein X^1 and X^4, and X^4 and X^{11} are independently amino acid residues suitable for stapling.

179. The agent of Embodiment 174, wherein X^1 and X^4, and X^4 and X^{11} are independently stapled.

180. The agent of any one of Embodiments 1-173, where the agent is an agent of any one of Embodiments 174-179.

181. The agent of any one of the preceding Embodiments, comprising a staple having the structure of L^s which is $-L^{s1}-L^{s2}-L^{s3}-$.

182. The agent of any one of the preceding Embodiments, wherein there are two staples in the agent each independently having the structure of L^s which is $-L^{s1}-L^{s2}-L^{s3}-$.

183. The agent of any one of Embodiments 181-182, wherein L^{s1} is a covalent bond, or an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-S-Cy-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

184. The agent of Embodiment 183, wherein L^{s1} is an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-S-Cy-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

185. The agent of Embodiment 183, wherein L^{s1} is an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-6} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-O-$, $-Cy-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

186. The agent of Embodiment 183, wherein L^{s1} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

187. The agent of any one of Embodiments 184-186, wherein L^{s1} comprises $-N(R')-$.

188. The agent of any one of Embodiments 184-186, wherein L^{s1} comprises $-N(R')C(O)O-$.

189. The agent of Embodiment 188, wherein $-N(R')-$ is closer to L^{s2}.

190. The agent of Embodiment 188, wherein −O− is closer to L^{s2}.

191. The agent of any one of Embodiments 184-186, wherein L^{s1} is $-(CH_2)m-N(R')-(CH_2)n-$, wherein each of m and n is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

192. The agent of any one of Embodiments 184-186, wherein L^{s1} is $-(CH_2)m-N(R')-C(O)-O-(CH_2)n-$, wherein each of m and n is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

193. The agent of any one of Embodiments 191-192, wherein $-(CH_2)m-$ is bonded L^{s2}.

194. The agent of any one of Embodiments 191-192, wherein $-(CH_2)n-$ is bonded L^{s2}.

195. The agent of any one of Embodiments 191-194, wherein m is 1.

196. The agent of any one of Embodiments 191-194, wherein m is 2.

197. The agent of any one of Embodiments 191-196, wherein n is 3.

198. The agent of any one of Embodiments 187-197, wherein R' is −H.

199. The agent of any one of Embodiments 187-197, wherein R' is optionally substituted C_{1-6} aliphatic.

200. The agent of any one of Embodiments 187-197, wherein R' is methyl.

201. The agent of any one of Embodiments 187-197, wherein R' is taken together with R^{a3} of the amino acid residue to which L^{s1} is bonded to and their intervening atom(s) to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atom(s).

202. The agent of Embodiment 201, wherein R' is taken together with R^{a3} of the amino acid residue to which L^{s3} is bonded to and their intervening atom(s) to form a 3-10 membered monocyclic ring having 0-5 heteroatoms in addition to the intervening atom(s).

203. The agent of any one of Embodiments 201-202, wherein the formed ring is saturated.

204. The agent of any one of Embodiments 201-203, wherein the formed ring is 4-membered.

205. The agent of any one of Embodiments 201-203, wherein the formed ring is 5-membered.

206. The agent of any one of Embodiments 201-205, wherein the formed ring has no heteroatoms in addition to the intervening atom(s).

207. The agent of Embodiment 183, wherein L^{s1} is optionally substituted $-(CH_2)n-$, wherein n is 1, 2, 3, 4, 5, or 6.

208. The agent of Embodiment 183, wherein L^{s1} is $-(CH_2)n-$, wherein n is 1, 2, 3, 4, 5, or 6.

209. The agent of Embodiment 183, wherein L^{s1} is $-CH_2-$.

210. The agent of Embodiment 183, wherein L^{s1} is optionally substituted $-(CH_2)n-C(O)-$, wherein n is 1, 2, 3, 4, 5, or 6.

211. The agent of Embodiment 183, wherein L^{s1} is $-(CH_2)n-C(O)-$, wherein n is 1, 2, 3, 4, 5, or 6.

212. The agent of Embodiment 183, wherein L^{s1} is $-(CH_2)n-C(O)-$, wherein n is 2 or 3.

213. The agent of any one of Embodiments 181-212, wherein L^{s1} is bonded to an amino acid residue closer to the N-terminus than an amino acid residue to which $-L^{s3}-$ is bond.

214. The agent of any one of Embodiments 181-213, wherein L^{s1} is bond to a carbon atom of the peptide backbone.

215. The agent of any one of Embodiments 181-214, wherein L^{s1} is bond to an alpha carbon atom of an amino acid residue.

216. The agent of any one of Embodiments 181-213, wherein L^{s1} is bond to a nitrogen atom of the peptide backbone.

217. The agent of any one of Embodiments 181-213, wherein L^{s1} is bond to a nitrogen atom of the peptide backbone, wherein the nitrogen atom is of an amino group bonded to an alpha carbon atom of an amino acid residue.

218. The agent of any one of Embodiments 216-217, wherein the nitrogen atom is bond to $-C(O)-$ of L^{s1}.

219. The agent of any one of Embodiments 181-218, wherein L^{s2} is a covalent bond, or an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-S-Cy-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

220. The agent of any one of Embodiments 181-218, wherein L^{s2} is an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-S-Cy-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

221. The agent of Embodiment 220, wherein L^{s2} is optionally substituted $-CH=CH-$.

222. The agent of Embodiment 220, wherein L^{s2} is $-CH=CH-$.

223. The agent of Embodiment 220, wherein the double bond is *E*.

224. The agent of Embodiment 220, wherein the double bond is *Z*.

225. The agent of Embodiment 220, wherein L^{s2} is optionally substituted $-CH_2-CH_2-$.

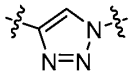
226. The agent of Embodiment 220, wherein L^{s2} is $-CH_2-CH_2-$.

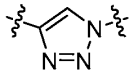
227. The agent of Embodiment 220, wherein L^{s2} is $-Cy-$.

228. The agent of Embodiment 227, wherein $-Cy-$ is optionally substituted saturated or partially unsaturated 5-6 membered ring having 0-4 heteroatoms.

229. The agent of Embodiment 227, wherein $-Cy-$ is optionally substituted phenyl ring.

230. The agent of Embodiment 227, wherein −Cy− is optionally substituted 5-6 membered aromatic ring having 1-4 heteroatoms.

231. The agent of Embodiment 227, wherein −Cy− is optionally substituted  .

232. The agent of Embodiment 227, wherein −Cy− is  .

233. The agent of any one of Embodiments 231-232, wherein the carbon atom is bonded to L^{s1}.

234. The agent of any one of Embodiments 231-232, wherein the carbon atom is bonded to L^{s3}.

235. The agent of Embodiment 220, wherein L^{s2} is −C(O)N(R')−.

236. The agent of Embodiment 235, wherein R' is −H.

237. The agent of Embodiment 235, wherein R' is optionally substituted C_{1-6} aliphatic.

238. The agent of any one of Embodiments 235-237, wherein the −N(R')− is bonded to L^{s1}.

239. The agent of any one of Embodiments 235-237, wherein the −N(R')− is bonded to L^{s3}.

240. The agent of Embodiment 220, wherein one or more methylene units are independently replaced with −C(O)N(R')− or −N(R')−, and one or more methylene units are independently replaced with $-C(R')_2-$, wherein one or more R' of one or more $-C(R')_2-$ are each independently taken together with R' of −C(O)N(R')− or −N(R')− and their intervening atom(s) to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atom(s).

241. The agent of Embodiment 240, wherein the formed ring is saturated.

242. The agent of any one of Embodiments 240-241, wherein the formed ring is 4-membered.

243. The agent of any one of Embodiments 240-242, wherein the formed ring is 5-membered.

244. The agent of any one of Embodiments 240-243, wherein the formed ring has no heteroatoms in addition to the intervening atom(s).

245. The agent of Embodiment 220, wherein L^{s2} is −S−L"−S−.

246. The agent of Embodiment 245, wherein L" is a covalent bond, or an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −S−Cy−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−.

247. The agent of Embodiment 245, wherein L" is an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −S−Cy−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−.

248. The agent of Embodiment 245, wherein L" is or comprise −Cy−.

249. The agent of Embodiment 245, wherein L" is or comprise $-(CH_2)m-Cy-(CH_2)n-$, wherein each m and n is optionally substituted 0 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, and each $-CH_2-$ is optionally substituted.

250. The agent of Embodiment 249, wherein each m and n is independently 1.

251. The agent of any one of Embodiments 248-250, wherein is optionally substituted phenyl.

252. The agent of any one of Embodiments 248-250, wherein is optionally substituted 5-6 membered aromatic ring having 1-4 heteroatoms.

253. The agent of any one of Embodiments 181-252, wherein L^{s3} is a covalent bond, or an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, –S–Cy–S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−.

254. The agent of Embodiment 253, wherein L^{s3} is an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, –S–Cy–S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−.

255. The agent of Embodiment 253, wherein L^{s3} is an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-6} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with −O−, −Cy−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

256. The agent of Embodiment 253, wherein L^{s3} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

257. The agent of any one of Embodiments 254-256, wherein L^{s3} comprises −N(R')−.

258. The agent of any one of Embodiments 254-256, wherein L^{s3} comprises −N(R')C(O)O−.

259. The agent of Embodiment 258, wherein −N(R')− is closer to L^{s2}.

260. The agent of Embodiment 258, wherein −O− is closer to L^{s2}.

261. The agent of any one of Embodiments 254-256, wherein L^{s3} is $-(CH_2)m-N(R')-(CH_2)n-$, wherein each of m and n is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

262. The agent of any one of Embodiments 254-256, wherein L^{s3} is $-(CH_2)m-N(R')-C(O)-O-(CH_2)n-$, wherein each of m and n is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

263. The agent of any one of Embodiments 261-262, wherein $-(CH_2)n-$ is bonded L^{s2}.

264. The agent of any one of Embodiments 261-262, wherein $-(CH_2)m-$ is bonded L^{s2}.

265. The agent of any one of Embodiments 261-264, wherein m is 1.

266. The agent of any one of Embodiments 261-264, wherein m is 2.

267. The agent of any one of Embodiments 261-266, wherein n is 3.

268. The agent of any one of Embodiments 257-267, wherein R' is −H.

269. The agent of any one of Embodiments 257-267, wherein R' is optionally substituted C_{1-6} aliphatic.

270. The agent of any one of Embodiments 257-267, wherein R' is methyl.

271. The agent of any one of Embodiments 257-267, wherein R' is taken together with R^{a3} of the amino acid residue to which L^{s3} is bonded to and their intervening atom(s) to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atom(s).

272. The agent of any one of Embodiments 257-267, wherein R' is taken together with R^{a3} of the amino acid residue to which L^{s3} is bonded to and their intervening atom(s) to form a 3-10 membered monocyclic ring having 0-5 heteroatoms in addition to the intervening atom(s).

273. The agent of any one of Embodiments 271-272, wherein the formed ring is saturated.

274. The agent of any one of Embodiments 271-273, wherein the formed ring is 4-membered.

275. The agent of any one of Embodiments 271-274, wherein the formed ring is 5-membered.

276. The agent of any one of Embodiments 271-275, wherein the formed ring has no heteroatoms in addition to the intervening atom(s).

277. The agent of Embodiment 253, wherein L^{s3} is optionally substituted $-(CH_2)n-$, wherein n is 1, 2, 3, 4, 5, or 6.

278. The agent of Embodiment 253, wherein L^{s3} is $-(CH_2)n-$, wherein n is 1, 2, 3, 4, 5, or 6.

279. The agent of Embodiment 253, wherein L^{s3} is $-(CH_2)_3-$.

280. The agent of Embodiment 253, wherein L^{s3} is $-(CH_2)_2-$.

281. The agent of Embodiment 253, wherein L^{s3} is $-CH_2-$.

282. The agent of Embodiment 253, wherein L^{s3} is optionally substituted $-(CH_2)n-C(O)-$, wherein n is 1, 2, 3, 4, 5, or 6.

283. The agent of Embodiment 253, wherein L^{s3} is $-(CH_2)n-C(O)-$, wherein n is 1, 2, 3, 4, 5, or 6.

284. The agent of Embodiment 253, wherein L^{s3} is $-(CH_2)n-C(O)-$, wherein n is 2 or 3.

285. The agent of any one of Embodiments 181-284, wherein L^{s3} is bonded to an amino acid residue closer to the N-terminus than an amino acid residue to which $-L^{s3}-$ is bond.

286. The agent of any one of Embodiments 181-285, wherein L^{s3} is bond to a carbon atom of the peptide backbone.

287. The agent of any one of Embodiments 181-286, wherein L^{s3} is bond to an alpha carbon atom of an amino acid residue.

288. The agent of any one of Embodiments 181-285, wherein L^{s3} is bond to a nitrogen atom of the peptide backbone.

289. The agent of any one of Embodiments 181-285, wherein L^{s3} is bond to a nitrogen atom of the peptide backbone, wherein the nitrogen atom is of an amino group bonded to an alpha carbon atom of an amino acid residue.

290. The agent of any one of Embodiments 288-289, wherein the nitrogen atom is bond to −C(O)− of L^{s3}.

291. The agent of any one of Embodiments 181-290, wherein a staple is optionally substituted $-CH_2-CH=CH-(CH_2)_3-$.

292. The agent of any one of Embodiments 181-290, wherein a staple is $-CH_2-CH=CH-(CH_2)_3-$.

293. The agent of Embodiment 291-292, wherein −CH=CH− is *E*.

294. The agent of Embodiment 291-292, wherein −CH=CH− is *Z*.

295. The agent of any one of Embodiments 181-290, wherein a staple is optionally substituted $-CH_2-CH=CH-(CH_2)_3-C(O)-$.

296. The agent of any one of Embodiments 181-290, wherein a staple is $-CH_2-CH=CH-(CH_2)_3-C(O)-$.

297. The agent of any one of Embodiments 181-290, wherein a staple is optionally substituted $-CH_2-CH=CH-(CH_2)_2-C(O)-$.

298. The agent of any one of Embodiments 181-290, wherein a staple is $-CH_2-CH=CH-(CH_2)_2-C(O)-$.

299. The agent of Embodiment 295-298, wherein −CH=CH− is *E*.

300. The agent of Embodiment 295-298, wherein −CH=CH− is *Z*.

301. The agent of any one of Embodiments 181-290, wherein a staple is optionally substituted $-(CH_2)n-$, wherein n is 1-20.

302. The agent of any one of Embodiments 181-290, wherein a staple is $-(CH_2)n-$, wherein n is 1-20.

303. The agent of any one of Embodiments 181-290, wherein a staple is optionally substituted $-(CH_2)n-CO-$, wherein n is 1-20.

304. The agent of any one of Embodiments 181-290, wherein a staple is $-(CH_2)n-C(O)-$, wherein n is 1-20.

305. The agent of Embodiment 301-304, wherein n is 4-10.

306. The agent of Embodiment 301-304, wherein n is 5-8.

307. The agent of Embodiment 301-304, wherein n is 6.

308. The agent of any one of Embodiments 291-307, wherein optionally substituted $-(CH_2)_3-$ or $-C(O)-$ is bonded to an amino acid residue closer to a N-terminus to the other amino acid residue bonded to the same staple.

309. The agent of any one of Embodiments 291-308, wherein optionally substituted $-(CH_2)_3-$ or $-C(O)-$ is bonded to an alpha-carbon atom of an amino acid residue.

310. The agent of any one of Embodiments 291-308, wherein optionally substituted $-(CH_2)_3-$ or $-C(O)-$ is bonded to a nitrogen atom of an amino acid residue.

311. The agent of any one of Embodiments 291-308, wherein optionally substituted $-(CH_2)_3-$ or $-C(O)-$ is bonded to a nitrogen atom bonded to an alpha carbon atom of an amino acid residue.

312. The agent of any one of Embodiments 291-311, wherein optionally substituted $-(CH_2)_3-$ or $-C(O)-$ is bonded to X^1.

313. The agent of Embodiment 312, wherein the other amino acid residue bonded to the staple is X^4.

314. The agent of any one of Embodiments 181-313, wherein a staple is $-(CH_2)m-N(R')-(CH_2)n-CH=CH-(CH_2)n'-$, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, and each $-CH_2-$ is independently optionally substituted.

315. The agent of any one of Embodiments 181-313, wherein a staple is $-(CH_2)m-N(R')-(CH_2)n-CH=CH-(CH_2)n'-$, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

316. The agent of any one of Embodiments 181-315, wherein a staple is $-(CH_2)m-N(R')-C(O)-O-(CH_2)n-CH=CH-(CH_2)n'-$, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, and each $-CH_2-$ is independently optionally substituted.

317. The agent of any one of Embodiments 181-315, wherein a staple is $-(CH_2)m-N(R')-C(O)-O-(CH_2)n-CH=CH-(CH_2)n'-$, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

318. The agent of any one of Embodiments 314-317, wherein the $-CH=CH-$ is *E*.

319. The agent of any one of Embodiments 314-317, wherein the $-CH=CH-$ is *Z*.

320. The agent of any one of Embodiments 181-319, wherein a staple is $-(CH_2)m-N(R')-(CH_2)n-CH_2-CH_2-(CH_2)n'-$, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, and each $-CH_2-$ is independently optionally substituted.

321. The agent of any one of Embodiments 181-320, wherein a staple is $-(CH_2)m-N(R')-(CH_2)n-CH_2-CH_2-(CH_2)n'-$, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

322. The agent of any one of Embodiments 181-321, wherein a staple is −(CH_2)m−N(R')−C(O)−O−(CH_2)n−CH_2−CH_2−(CH_2)n'−, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, and each −CH_2− is independently optionally substituted.

323. The agent of any one of Embodiments 181-322, wherein a staple is −(CH_2)m−N(R')−C(O)−O−(CH_2)n−CH_2−CH_2−(CH_2)n'−, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

324. The agent of any one of Embodiments 314-323, wherein −(CH_2)m− is bonded an amino acid residue closer to a N-terminus to the other amino acid residue bonded to the same staple.

325. The agent of any one of Embodiments 314-323, wherein −(CH_2)m− is bonded an amino acid residue closer to a C-terminus to the other amino acid residue bonded to the same staple.

326. The agent of any one of Embodiments 314-325, wherein m is 1.

327. The agent of any one of Embodiments 314-325, wherein m is 2.

328. The agent of any one of Embodiments 314-327, wherein n is 1.

329. The agent of any one of Embodiments 314-327, wherein n is 2.

330. The agent of any one of Embodiments 314-327, wherein n is 3.

331. The agent of any one of Embodiments 314-330, wherein n' is 3.

332. The agent of any one of Embodiments 314-331, wherein R' is −H.

333. The agent of any one of Embodiments 314-331, wherein R' is optionally substituted C_{1-6} aliphatic.

334. The agent of any one of Embodiments 314-331, wherein R' is methyl.

335. The agent of any one of Embodiments 314-331, wherein R' is taken together with R^{a3} of the amino acid residue to which L^{s3} is bonded to and their intervening atom(s) to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atom(s).

336. The agent of any one of Embodiments 314-331, wherein R' is taken together with R^{a3} of the amino acid residue to which L^{s3} is bonded to and their intervening atom(s) to form a 3-10 membered monocyclic ring having 0-5 heteroatoms in addition to the intervening atom(s).

337. The agent of any one of Embodiments 335-336, wherein the formed ring is saturated.

338. The agent of any one of Embodiments 335-337, wherein the formed ring is 4-membered.

339. The agent of any one of Embodiments 335-338, wherein the formed ring is 5-membered.

340. The agent of any one of Embodiments 335-339, wherein the formed ring has no heteroatoms in addition to the intervening atom(s).

341. The agent of any one of Embodiments 181-340, wherein a staple is optionally substituted −*CH_2−N(−CH_2−**CH_2−)−C(O)O−$(CH_2)_3$−CH=CH−$(CH_2)_3$−, wherein −*CH_2− and −**CH_2− are bonded to the same amino acid residue.

342. The agent of any one of Embodiments 181-340, wherein a staple is $-*CH_2-N(-CH_2-**CH_2-)-C(O)O-(CH_2)_3-CH=CH-(CH_2)_3-$, wherein $-*CH_2-$ and $-**CH_2-$ are bonded to the same amino acid residue.

343. The agent of Embodiment 341-342, wherein −CH=CH− is *E*.

344. The agent of Embodiment 341-342, wherein −CH=CH− is *Z*.

345. The agent of any one of Embodiments 181-340, wherein a staple is optionally substituted $-*CH_2-N(-CH_2-**CH_2-)-C(O)O-(CH_2)_3-CH_2-CH_2-(CH_2)_3-$, wherein $-*CH_2-$ and $-**CH_2-$ are bonded to the same amino acid residue.

346. The agent of any one of Embodiments 181-340, wherein a staple is $-*CH_2-N(-CH_2-**CH_2-)-C(O)O-(CH_2)_3-CH_2-CH_2-(CH_2)_3-$, wherein $-*CH_2-$ and $-**CH_2-$ are bonded to the same amino acid residue.

347. The agent of any one of Embodiments 341-346, wherein $-*CH_2-$ and $-**CH_2-$ are bonded to the same atom.

348. The agent of any one of Embodiments 314-347, wherein optionally substituted $-(CH_2)_m-$ or $-*CH_2-$ is bonded to an amino acid residue closer to a C-terminus to the other amino acid residue bonded to the same staple.

349. The agent of any one of Embodiments 314-348, wherein optionally substituted $-(CH_2)_m-$ or $-*CH_2-$ is bonded to an alpha-carbon atom of an amino acid residue.

350. The agent of any one of Embodiments 314-349, wherein optionally substituted $-(CH_2)_m-$ or $-*CH_2-$ is bonded to X^{11}.

351. The agent of Embodiment 350, wherein the other amino acid residue bonded to the staple is X^4.

352. The agent of any one of Embodiments 181-313, wherein a staple is optionally substituted $-(CH_2)m-CH=CH-(CH_2)n-$.

353. The agent of any one of Embodiments 181-313, wherein a staple is $-(CH_2)m-CH=CH-(CH_2)n-$.

354. The agent of any one of Embodiments 181-313, wherein a staple is optionally substituted $-(CH_2)m-CH_2-CH_2-(CH_2)n-$.

355. The agent of any one of Embodiments 181-313, wherein a staple is $-(CH_2)m-CH_2-CH_2-(CH_2)n-$.

356. The agent of any one of Embodiments 352-355, wherein m is 1.

357. The agent of any one of Embodiments 352-355, wherein m is 2.

358. The agent of any one of Embodiments 352-355, wherein m is 3.

359. The agent of any one of Embodiments 352-355, wherein m is 4.

360. The agent of any one of Embodiments 352-355, wherein m is 5.

361. The agent of any one of Embodiments 352-355, wherein m is 6.

362. The agent of any one of Embodiments 352-355, wherein m is 7.

363. The agent of any one of Embodiments 352-355, wherein m is 8.

364. The agent of any one of Embodiments 352-363, wherein n is 1.

365. The agent of any one of Embodiments 352-363, wherein n is 2.

366. The agent of any one of Embodiments 352-363, wherein n is 3.

367. The agent of any one of Embodiments 352-363, wherein n is 4.

368. The agent of any one of Embodiments 352-363, wherein n is 5.

369. The agent of any one of Embodiments 352-363, wherein n is 6.

370. The agent of any one of Embodiments 352-363, wherein n is 7.

371. The agent of any one of Embodiments 352-363, wherein n is 8.

372. The agent of any one of Embodiments 352-371, wherein the staple is boned to X^4 and X^{11}.

373. The agent of any one of the preceding Embodiments, wherein a staple has a length of 5-10 chain atoms.

374. The agent of Embodiment 373, wherein the length is 5 chain atoms.

375. The agent of Embodiment 373, wherein the length is 6 chain atoms.

376. The agent of Embodiment 373, wherein the length is 7 chain atoms.

377. The agent of any one of Embodiments 373-376, wherein the staple is a (i, i+3) staple.

378. The agent of any one of the preceding Embodiments, wherein a staple has a length of 10-25 chain atoms.

379. The agent of Embodiment 378, wherein the length is 12 chain atoms.

380. The agent of Embodiment 378, wherein the length is 13 chain atoms.

381. The agent of Embodiment 378, wherein the length is 14 chain atoms.

382. The agent of any one of Embodiments 378-381, wherein the staple is a (i, i+7) staple.

383. The agent of any one of the any one of the preceding Embodiments, wherein X^1 is a residue of an amino acid having the structure of formula A-I, A-II or A-III, wherein R^{a2} and R^{a3} are taken together with their intervening atom(s) to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atom(s).

384. The agent of any one of the preceding Embodiments, wherein X^1 is $-N(R^{a1})-L^{a1}-C(-L^{a}-R^{SP1})(R^{a3})-L^{a2}-C(O)-$.

385. The agent of Embodiment 384, wherein R^{a1} is $-H$.

386. The agent of any one of Embodiments 384-385, wherein R^{a3} is $-H$.

387. The agent of any one of Embodiments 384-385, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

388. The agent of Embodiment 384, wherein R^{a1} and R^{a3} are taken together with their intervening atom(s) to form an optionally substituted 3-10 membered ring having 0-3 heteroatoms in addition to the intervening atom(s).

389. The agent of Embodiment 388, wherein R^{a1} and R^{a3} are taken together with their intervening atom(s) to form an 5-membered saturated ring having no heteroatoms in addition to the nitrogen to which R^{a1} is attached.

390. The agent of any one of Embodiments 384-389, wherein L^{a1} is a covalent bond.

391. The agent of any one of Embodiments 384-390, wherein L^{a} is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

392. The agent of any one of Embodiments 384-390, wherein L^{a} is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

393. The agent of any one of Embodiments 384-390, wherein L^{a} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

394. The agent of any one of Embodiments 384-391, wherein L^{a} is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

395. The agent of any one of Embodiments 384-394, wherein L^{a} is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

396. The agent of any one of Embodiments 384-395, wherein L^{a2} is a covalent bond.

397. The agent of any one of Embodiments 384-396, wherein R^{SP1} is optionally substituted $-CH=CH_2$.

398. The agent of any one of Embodiments 384-396, wherein R^{SP1} is $-CH=CH_2$.

399. The agent of any one of the preceding Embodiments, wherein X^4 is a residue of an amino acid that comprises two olefins each independently suitable for stapling.

400. The agent of any one of the preceding Embodiments, wherein X^4 is $-N(R^{a1})-L^{a1}-C(-L^{a}-R^{SP1})(R^{a3})-L^{a2}-C(O)-$.

401. The agent of Embodiment 400, wherein R^{a1} is −H.

402. The agent of any one of Embodiments 400-401, wherein R^{a3} is −H.

403. The agent of any one of Embodiments 400-401, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

404. The agent of any one of the preceding Embodiments, wherein X^4 is $-N(R^{a1})-L^{a1}-C(-L^{a}-R^{SP1})(-L^{a}-R^{SP2})-L^{a2}-C(O)-$.

405. The agent of any one of Embodiments 400-404, wherein L^{a1} is a covalent bond.

406. The agent of any one of Embodiments 400-405, wherein L^a is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

407. The agent of any one of Embodiments 400-405, wherein L^a is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

408. The agent of any one of Embodiments 400-405, wherein L^a is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

409. The agent of any one of Embodiments 400-406, wherein L^a bonded to R^{SP1} is optionally substituted −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

410. The agent of any one of Embodiments 400-406, wherein L^a bonded to R^{SP1} is −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

411. The agent of any one of Embodiments 400-410, wherein L^{a2} is a covalent bond.

412. The agent of any one of Embodiments 400-411, wherein R^{SP1} is optionally substituted −CH=CH_2.

413. The agent of any one of Embodiments 400-411, wherein R^{SP1} is −CH=CH_2.

414. The agent of any one of Embodiments 400-413, wherein R^{SP2} is optionally substituted −CH=CH_2.

415. The agent of any one of Embodiments 400-413, wherein R^{SP2} is −CH=CH_2.

416. The agent of any one of Embodiments 400-415, wherein L^a bonded to R^{SP1} is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

417. The agent of any one of Embodiments 400-415, wherein L^a bonded to R^{SP1} is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

418. The agent of any one of Embodiments 400-415, wherein L^a bonded to R^{SP1} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

419. The agent of any one of Embodiments 400-415, wherein L^a bonded to R^{SP1} is optionally substituted −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

420. The agent of any one of Embodiments 400-415, wherein L^a bonded to R^{SP1} is −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

421. The agent of any one of Embodiments 404-420, wherein L^a bonded to R^{SP2} is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

422. The agent of any one of Embodiments 404-420, wherein L^a bonded to R^{SP2} is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

423. The agent of any one of Embodiments 404-420, wherein L^a bonded to R^{SP2} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

424. The agent of any one of Embodiments 404-420, wherein L^a bonded to R^{SP2} is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

425. The agent of any one of Embodiments 404-420, wherein L^a bonded to R^{SP2} is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

426. The agent of any one of the preceding Embodiments, wherein X^4 is a residue of an amino acid having the structure of formula A-I, A-II or A-III, wherein R^{a2} and R^{a3} independently comprises an olefin.

427. The agent of any one of the preceding Embodiments, wherein X^4 is a residue of an amino acid having the structure of formula A-I, A-II or A-III, wherein R^{a2} and R^{a3} are independently $-L^a-CH=CH_2$.

428. The agent of any one of the preceding Embodiments, wherein X^4 is B5.

429. The agent of any one of the preceding Embodiments, wherein X^{11} is an amino acid residue suitable for stapling.

430. The agent of any one of the preceding Embodiments, wherein X^{11} is $-N(R^{a1})-L^{a1}-C(-L^a-R^{SP1})(R^{a3})-L^{a2}-C(O)-$.

431. The agent of Embodiment 430, wherein R^{a1} is −H.

432. The agent of any one of Embodiments 430-431, wherein L^{a1} is a covalent bond.

433. The agent of any one of Embodiments 430-432, wherein L^a is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

434. The agent of any one of Embodiments 430-432, wherein L^a is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

435. The agent of any one of Embodiments 430-432, wherein L^a is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

436. The agent of any one of Embodiments 430-433, wherein L^a is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

437. The agent of any one of Embodiments 430-436, wherein L^{a2} is a covalent bond.

438. The agent of any one of Embodiments 430-437, wherein R^{SP1} is optionally substituted $-CH=CH_2$.

439. The agent of any one of Embodiments 430-437, wherein R^{SP1} is $-CH=CH_2$.

440. The agent of any one of Embodiments 430-439, wherein one methylene unit of L is replaced with $-N(R')-$.

441. The agent of any one of Embodiments 430-439, wherein one methylene unit of L is replaced with $-N(R')C(O)O-$.

442. The agent of any one of Embodiments 440-441, wherein R' is $-H$.

443. The agent of any one of Embodiments 440-441, wherein R' is C_{1-6} aliphatic.

444. The agent of any one of Embodiments 440-441, wherein R' and R^{a3} are taken together with their intervening atom(s) to form an optionally substituted 3-14 membered ring having 0-5 heteroatoms in addition to the nitrogen atom to which R' is attached.

445. The agent of any one of Embodiments 440-441, wherein R' and R^{a3} are taken together with their intervening atom(s) to form an optionally substituted 3-8 membered ring having 0-5 heteroatoms in addition to the nitrogen atom to which R' is attached.

446. The agent of any one of Embodiments 440-441, wherein R' and R^{a3} are taken together with their intervening atom(s) to form an optionally substituted 3-7 membered ring having no heteroatoms in addition to the nitrogen atom to which R' is attached.

447. The agent of any one of Embodiments 444-446, wherein the ring is monocyclic.

448. The agent of any one of Embodiments 444-447, wherein the ring is saturated.

449. The agent of any one of Embodiments 444-448, wherein the ring is 5-membered.

450. The agent of any one of Embodiments 430-443, wherein R^{a3} is $-H$.

451. The agent of any one of Embodiments 430-443, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

452. The agent of any one of Embodiments 430-439 and 450-451, wherein L^a is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

453. The agent of Embodiment 452, wherein L^a is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

454. The agent of any one of the preceding Embodiments,, wherein X^{11} is PyrS2, S8, PyrS, S7, PyrS3, SeN, Az, S4, S6, SdN, S10, S5, SgN or PyrS1.

455. The agent of Embodiment 450, wherein X^{11} is PyrS2.

456. The agent of Embodiment 450, wherein X^{11} is S8.

457. The agent of Embodiment 450, wherein X^{11} is PyrS3.

458. The agent of any one of the preceding Embodiments, wherein X^1 is selected from PL3, Phe, Ala, Aib, Pro, alphaMePro or Asp.

459. The agent of any one of the preceding Embodiments, wherein X^1 is selected from Bn3OAllyl, BzAm3Oallyl, HypBzEs3OAllyl, HypEs4, HypEs5, HypPAc3OAllyl, MePro, NMebAla, PAc3OAllyl, ProAm5, ProAm6, ProBzAm3OAllyl, ProPAc3OAllyl, ProSAm3, PyrR, Sar, Aib, Ala, Asp, Gly, Phe, PL3, Pro, R3, and R5.

460. The agent of any one of the preceding Embodiments, wherein X^1 is selected from Bn3OAllyl, BzAm3Oallyl, HypBzEs3OAllyl, HypEs4, HypEs5, HypPAc3OAllyl, MePro, NMebAla, PAc3OAllyl, ProAm5, ProAm6, ProBzAm3OAllyl, ProPAc3OAllyl, ProSAm3, PyrR, and Sar.

461. The agent of any one of the preceding Embodiments, wherein X^1 is selected from Aib, Ala, Asp, Gly, Phe, PL3, Pro, R3, and R5.

462. The agent of any one of the preceding Embodiments, wherein X^2 is selected from Asp, RbGlu, Phe, Asn, Ile, Glu, NMeD, His, Ala, tetz, isoDAsp, Ser, Gln, Leu, Hse, Dab, Tyr, 3MeF, 3FF, [MeSO2]Dap, [Tf]Dap and SbGlu.

463. The agent of any one of the preceding Embodiments, wherein X^2 is selected from Asp, Hse, Asn, Glu, RbGlu, SbGlu, and isoDAsp.

464. The agent of any one of the preceding Embodiments, wherein X^2 is selected from [CH2CMe2CO2H]TriAzDap, [CMe2CO2H]TriAzDap, [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AcAsp, AspSH, RbOHAsp, [MeSO2]Dap, [Tf]Dap, 2COOHF, 3COOHF, 3FF, 3MeF, 4Thz, 4Tria, Aad, Ala, Asn, Asp, Dab, Gln, Glu, His, Hse, Ile, isoDAsp, Leu, NMeD, Phe, PL3, R3, R5, RbGlu, SbGlu, Ser, tetz, TfeGA, Thr, and Tyr.

465. The agent of any one of the preceding Embodiments, wherein X^2 is selected from [CH2CMe2CO2H]TriAzDap, [CMe2CO2H]TriAzDap, [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AcAsp, AspSH, and RbOHAsp.

466. The agent of any one of the preceding Embodiments, wherein X^2 is selected from [MeSO2]Dap, [Tf]Dap, 2COOHF, 3COOHF, 3FF, 3MeF, 4Thz, 4Tria, Aad, Ala, Asn, Asp, Dab, Gln, Glu, His, Hse, Ile, isoDAsp, Leu, NMeD, Phe, PL3, R3, R5, RbGlu, SbGlu, Ser, tetz, TfeGA, Thr, and Tyr.

467. The agent of any one of the preceding Embodiments, wherein X^2 comprises a side chain comprising an acid group.

468. The agent of any one of the preceding Embodiments, wherein X^2 comprises a side chain comprising −COOH or a salt form thereof.

469. The agent of any one of the preceding Embodiments, wherein X^2 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

470. The agent of Embodiment 469, wherein R^{a1} is −H.

471. The agent of any one of Embodiments 469-470, wherein R^{a3} is −H.

472. The agent of any one of Embodiments 469-470, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

473. The agent of any one of Embodiments 469-472, wherein L^{a1} is a covalent bond

474. The agent of any one of Embodiments 469-473, wherein L^{a2} is a covalent bond.

475. The agent of any one of Embodiments 469-474, wherein R^{a2} is or comprises an acidic or polar group.

476. The agent of any one of Embodiments 469-475, wherein R^{a2} is −L”−COOH.

477. The agent of any one of Embodiments 469-475, wherein R^{a2} is −L”−Cy−COOH.

478. The agent of Embodiment 477, wherein −Cy− is optionally substituted phenylene.

479. The agent of any one of Embodiments 469-475, wherein R^{a2} is −L”−C(O)N(R’)$_2$.

480. The agent of any one of Embodiments 476-479, wherein L” is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

481. The agent of any one of Embodiments 476-479, wherein L” is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

482. The agent of any one of Embodiments 476-479, wherein L” is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

483. The agent of any one of Embodiments 476-480, wherein L” is optionally substituted −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

484. The agent of any one of Embodiments 476-483, wherein L” is −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

485. The agent of any one of the preceding Embodiments, wherein X^2 is Asp.

486. The agent of any one of Embodiments 1-462, wherein X^2 comprises a side chain comprising a polar group.

487. The agent of any one of Embodiments 1-462, wherein X^2 comprises a side chain comprising −OH.

488. The agent of any one of Embodiments 1-462, wherein X^2 comprises a side chain comprising an amide group.

489. The agent of any one of the preceding Embodiments, wherein X^3 is −N(R^{a1})−L^{a1}−C(−L^a−R^{SP1})(R^{a3})−L^{a2}−C(O)−.

490. The agent of Embodiment 489, wherein R^{a1} is −H.

491. The agent of any one of Embodiments 489-490, wherein R^{a3} is −H.

492. The agent of any one of Embodiments 489-490, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

493. The agent of any one of Embodiments 489-492, wherein L^{a1} is a covalent bond.

494. The agent of any one of Embodiments 489-493, wherein L^{a} is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

495. The agent of any one of Embodiments 489-493, wherein L^{a} is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

496. The agent of any one of Embodiments 489-493, wherein L^{a} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−,−N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

497. The agent of any one of Embodiments 489-494, wherein L^{a} is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

498. The agent of any one of Embodiments 489-494, wherein L^{a} is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

499. The agent of any one of Embodiments 489-498, wherein L^{a2} is a covalent bond.

500. The agent of any one of Embodiments 489-499, wherein R^{SP1} is optionally substituted $-CH=CH_2$.

501. The agent of any one of Embodiments 489-499, wherein R^{SP1} is $-CH=CH_2$.

502. The agent of any one of the preceding Embodiments, wherein X^3 is selected from Npg, Ala, Ile, Leu, Cha, Phe, Abu, hLeu, RdN, 1NapA, 2NapA, R8, Val, F3CA, [AzAc]Lys, Gln, aIle, Nva, TOMe, hSe, S(Ome), nLeu, Thr, Asn, Ser, and HF2CA.

503. The agent of any one of the preceding Embodiments, wherein X^3 comprises a hydrophobic side chain.

504. The agent of any one of the preceding Embodiments, wherein X^3 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

505. The agent of Embodiment 504, wherein X^3 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$.

506. The agent of Embodiment 504, wherein X^3 is $-NH-C(R^{a2})(R^{a3})-C(O)-$.

507. The agent of any one of Embodiments 504-506, wherein R^{a2} and R^{a3} are independently hydrogen or optionally substituted C_{1-10} aliphatic.

508. The agent of any one of Embodiments 504-506, wherein one of R^{a2} and R^{a3} is hydrogen and the other is C_{1-10} aliphatic.

509. The agent of any one of Embodiments 504-506, wherein R^{a2} and R^{a3} are taken together with the carbon atom to which they are attached to form an optionally substituted 3-8 membered ring having 1-3 heteroatoms.

510. The agent of any one of Embodiments 504-506, wherein R^{a2} and R^{a3} are taken together with the carbon atom to which they are attached to form 3-8 membered cycloalkyl.

511. The agent of any one of the preceding Embodiments, wherein the side chain of X^3 is C_{1-10} alkyl optionally substituted with one or more substituents independently selected from halogen, −SR and −OR, wherein each R is independently C_{1-4} alkyl.

512. The agent of any one of the preceding Embodiments, wherein the side chain of X^3 is C_{1-10} alkyl.

513. The agent of any one of the preceding Embodiments, wherein X^3 is not stapled.

514. The agent of any one of the preceding Embodiments, wherein X^3 is Npg.

515. The agent of any one of Embodiments 1-502, wherein X^3 is an amino acid residue suitable for stapling.

516. The agent of any one of Embodiments 1-502, wherein X^3 is stapled with X^{10}.

517. The agent of Embodiment 516, wherein the X^3-X^{10} staple is the only staple in the peptide.

518. The agent of any one of Embodiments 515-517, wherein X^3 is RdN or R8.

519. The agent of any one of the preceding Embodiments, wherein X^3 is selected from [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me3AdamantC]-Lys, [Me3AdamantC-PEG2]-Lys, Npa, 1NapA, 2NapA, Abu, aIle, Ala, Asn, Asp, B5, Cha, F3CA, Gln, Glu, HF2CA, hLeu, hSe, Ile, iPrLys, Leu, Lys, nLeu, Npg, Nva, Phe, R8, RdN, S(Ome), Ser, TfeGA, Thr, TOMe, Trp, Tyr, and Val.

520. The agent of any one of the preceding Embodiments, wherein X^3 is selected from [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me3AdamantC]-Lys, [Me3AdamantC-PEG2]-Lys, and Npa.

521. The agent of any one of the preceding Embodiments, wherein X^3 is selected from 1NapA, 2NapA, Abu, aIle, Ala, Asn, Asp, B5, Cha, F3CA, Gln, Glu, HF2CA, hLeu, hSe, Ile, iPrLys, Leu, Lys, nLeu, Npg, Nva, Phe, R8, RdN, S(Ome), Ser, TfeGA, Thr, TOMe, Trp, Tyr, and Val.

522. The agent of any one of the preceding Embodiments, wherein X^4 is selected from B5, R8, RdN, R5, Ala, RgN, ReN, R7, Az, Asp, R6, and R4.

523. The agent of any one of the preceding Embodiments, wherein X^4 and X^{11} are stapled.

524. The agent of Embodiment 523, wherein the X^4-X^{11} staple is the only staple in the peptide.

525. The agent of Embodiment 523 or 524, wherein X^4 is selected from R8, RdN, R5, RgN, ReN, R7, Az, R6, and R4.

526. The agent of any one of the preceding Embodiments, wherein X^4 is selected from B3, B4, B6, Aib, Ala, Asp, Az, B5, Npg, R3, R4, R5, R6, R7, R8, RdN, ReN, RgN, S3, S4, S5, and S6.

527. The agent of any one of the preceding Embodiments, wherein X^4 is selected from B3, B4, and

B6.

528. The agent of any one of the preceding Embodiments, wherein X^4 is selected from Aib, Ala, Asp, Az, B5, Npg, R3, R4, R5, R6, R7, R8, RdN, ReN, RgN, S3, S4, S5, and S6.

529. The agent of any one of Embodiments 1-522, wherein X^4 is not stapled.

530. The agent of Embodiment 529, wherein X^4 is Ala or Asp.

531. The agent of any one of the preceding Embodiments, wherein X^5 is selected from Asp, Hse, Asn, Glu, tetz, 3Thi, hPhe, 2pyrA, Ala, [MeSO2]Dap, [Tf]Dap, Ser, Gln, Leu, Dab, [MeSO2]Dab, nLeu, His, 3pyrA, 4pyrA, [NHiPr]AsnR, [NHEt]AsnR, [NHnPr]AsnR, [NHCyPr]AsnR, [NHCyBu]AsnR, [NHMe]AsnR, Phe, isoAsp, isoDAsp, RbGlu, and SbGlu.

532. The agent of any one of the preceding Embodiments, wherein X^5 is selected from [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AspSH, bMe2Asp, [MeSO2]Dab, [MeSO2]Dap, [NHCyBu]AsnR, [NHCyPr]AsnR, [NHEt]AsnR, [NHiPr]AsnR, [NHMe]AsnR, [NHnPr]AsnR, [Tf]Dap, 2pyrA, 3pyrA, 3Thi, 4pyrA, Ala, Arg, Asn, Asp, B5, BztA, Dab, Gln, Glu, His, hPhe, Hse, isoAsp, isoDAsp, Leu, nLeu, Npg, RbGlu, SbGlu, Ser, tetz, and Thr.

533. The agent of any one of the preceding Embodiments, wherein X^5 is selected from [Et]AspE, [EtSSEt]AspE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSpy]AspE, [Me]AspE, AspSH, and bMe2Asp.

534. The agent of any one of the preceding Embodiments, wherein X^5 is selected from [MeSO2]Dab, [MeSO2]Dap, [NHCyBu]AsnR, [NHCyPr]AsnR, [NHEt]AsnR, [NHiPr]AsnR, [NHMe]AsnR, [NHnPr]AsnR, [Tf]Dap, 2pyrA, 3pyrA, 3Thi, 4pyrA, Ala, Arg, Asn, Asp, B5, BztA, Dab, Gln, Glu, His, hPhe, Hse, isoAsp, isoDAsp, Leu, nLeu, Npg, RbGlu, SbGlu, Ser, tetz, and Thr.

535. The agent of any one of the preceding Embodiments, wherein X^5 is selected from Asp, Asn, Gln, Glu, Hse, and Ser.

536. The agent of any one of the preceding Embodiments, wherein X^5 comprises a side chain comprising an acid group.

537. The agent of any one of the preceding Embodiments, wherein X^5 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

538. The agent of Embodiment 537, wherein R^{a1} is −H.

539. The agent of any one of Embodiments 537-538, wherein R^{a3} is −H.

540. The agent of any one of Embodiments 537-538, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

541. The agent of any one of Embodiments 537-540, wherein L^{a1} is a covalent bond.

542. The agent of any one of Embodiments 537-541, wherein L^{a2} is a covalent bond.

543. The agent of any one of Embodiments 537-542, wherein R^{a2} is or comprises an acidic or polar group.

544. The agent of any one of Embodiments 537-543, wherein R^{a2} is −L”−COOH.

545. The agent of any one of Embodiments 537-543, wherein R^{a2} is −L”−Cy−COOH.

546. The agent of Embodiment 545, wherein −Cy− is optionally substituted phenylene.

547. The agent of any one of Embodiments 537-543, wherein R^{a2} is −L”−C(O)N(R’)$_2$.

548. The agent of any one of Embodiments 544-547, wherein L” is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

549. The agent of any one of Embodiments 544-547, wherein L” is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

550. The agent of any one of Embodiments 544-547, wherein L” is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

551. The agent of any one of Embodiments 544-548, wherein L” is optionally substituted −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

552. The agent of any one of Embodiments 544-550, wherein L” is −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

553. The agent of any one of the preceding Embodiments, wherein X^5 comprises a side chain comprising −COOH or a salt form thereof.

554. The agent of any one of the preceding Embodiments, wherein X^5 is Asp.

555. The agent of any one of Embodiments 1-531, wherein X^5 comprises a side chain comprising a polar group.

556. The agent of any one of Embodiments 1-531, wherein X^5 comprises a side chain comprising −OH.

557. The agent of any one of Embodiments 1-531, wherein X^5 comprises a side chain comprising an amide group.

558. The agent of any one of the preceding Embodiments, wherein X^6 is selected from Asp, Glu, TfeGA, Thr, EtGA, Asn, 3COOHF, HIs, Gln, 2NapA, 4COOHF, nLeu, Leu, Cit, Aad, Cha, hLeu, hPhe, Ala, 3PyrA, Bip, Tyr, aMeDF, Phe, 1NapA, DaMeL, 3F3MeF, 4F3MeF, tetz, Arg, 2COOHF, DGlu, BztA, Trp, 6F1NapA, 3FF, 4FF, 34FF, 2PyrA, 4PyrA, hTyr, Qui, DipA, 4AmPhe, 2Thi, 1meH, [iPr]GA, [Pfbn]GA, [Tfb]GA, [Bn]GA, Lys, [Tfp]Dap, 1AcAW, Ser, Val, and [MeSO2]Dap.

559. The agent of any one of the preceding Embodiments, wherein X^6 is selected from [2COOH4NH2Ph]Dap, [2COOH4NO2Ph]Cys, [2COOH4NO2Ph]Dap, [2COOHPh]TriAzDab, [2COOHPh]TriAzDap, [2Nic]Dap, [3COOH4NO2Ph]Dap, [4AcMePip]GA, [4AcMePip]GAbu,

[4CF3PhAc]GA, [4CF3PhAc]GAbu, [Ac]GA, [Ac]GAbu, [Bn]GAbu, [CCpCO2H]TriAzDap, [CF3CO]GA, [CH2CChCO2H]TriAzDap, [CH2CCpCO2H]TriAzDap, [CH2CH2CO2H]TriAzDab, [CH2CH2CO2H]TriAzDap, [CH2CMe2CO2H]TriAzDab, [CH2CMe2CO2H]TriAzDap, [CH2CO2H]GAbu, [CH2CO2H]TriAzDab, [CH2CO2H]TriAzDap, [CMe2CO2H]TriAzDab, [CMe2CO2H]TriAzDap, [Et]AspE, [Et]GA, [Et]GAbu, [Et]GluE, [EtSSEt]AspE, [EtSSEt]GluE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSPh]GluE, [EtSSpy]GluE, [Me]AspE, [Me]GA, [Me]GluE, [MeMorphBz]GA, [MeMorphBz]GAbu, [MePipAc]GA, [MePipAc]GAbu, [MorphAc]GA, [MorphAc]GAbu, [MorphEt]GAbu, [NdiMeButC]GA, [NdiMeButC]GAbu, [Pfb]GA, [Pfbn]GAbu, [PfBz]GA, [PfBz]GAbu, [PfPhAc]GA, [PfPhAc]GAbu, [Pic]GA, [Pic]GAbu, [sBu]GA, [Tfb]GAbu, [Tfp]GA, [Tfp]GAbu, 3TzF, 4F3COOHF, 4TzF, 5F3Me3COOHF, 5iPr3COOHF, AspSH, GAbu, GluSH, R2COOPipA, R3COOPipA, S2COOPipA, S3COOPipA, [Bn]GA, [iPr]GA, [Me2NPr]GA, [Me2NPr]GAbu, [MeSO2]Dap, [Pfbn]GA, [Tfb]GA, [Tfp]Dap, 1AcAW, 1meH, 1NapA, 2COOHF, 2NapA, 2PyrA, 2Thi, 34FF, 3cbmf, 3COOHF, 3F3MeF, 3FF, 3PyrA, 3thi, 4AmPhe, 4COOHF, 4F3MeF, 4FF, 4PyrA, 6F1NapA, Aad, Ala, aMeDF, Arg, Asn, Asp, B5, Bip, BztA, Cha, Cit, DaMeL, DGlu, DipA, EtGA, GA, Gln, Glu, His, hLeu, hPhe, Hse, hTyr, Leu, Lys, nLeu, Npg, Pff, Phe, Qui, Ser, tetz, TfeGA, Thr, Trp, Tyr, and Val.

560. The agent of any one of the preceding Embodiments, wherein X^6 is selected from [2COOH4NH2Ph]Dap, [2COOH4NO2Ph]Cys, [2COOH4NO2Ph]Dap, [2COOHPh]TriAzDab, [2COOHPh]TriAzDap, [2Nic]Dap, [3COOH4NO2Ph]Dap, [4AcMePip]GA, [4AcMePip]GAbu, [4CF3PhAc]GA, [4CF3PhAc]GAbu, [Ac]GA, [Ac]GAbu, [Bn]GAbu, [CCpCO2H]TriAzDap, [CF3CO]GA, [CH2CChCO2H]TriAzDap, [CH2CCpCO2H]TriAzDap, [CH2CH2CO2H]TriAzDab, [CH2CH2CO2H]TriAzDap, [CH2CMe2CO2H]TriAzDab, [CH2CMe2CO2H]TriAzDap, [CH2CO2H]GAbu, [CH2CO2H]TriAzDab, [CH2CO2H]TriAzDap, [CMe2CO2H]TriAzDab, [CMe2CO2H]TriAzDap, [Et]AspE, [Et]GA, [Et]GAbu, [Et]GluE, [EtSSEt]AspE, [EtSSEt]GluE, [EtSSHex]AspE, [EtSSPh]AspE, [EtSSPh]GluE, [EtSSpy]GluE, [Me]AspE, [Me]GA, [Me]GluE, [MeMorphBz]GA, [MeMorphBz]GAbu, [MePipAc]GA, [MePipAc]GAbu, [MorphAc]GA, [MorphAc]GAbu, [MorphEt]GAbu, [NdiMeButC]GA, [NdiMeButC]GAbu, [Pfb]GA, [Pfbn]GAbu, [PfBz]GA, [PfBz]GAbu, [PfPhAc]GA, [PfPhAc]GAbu, [Pic]GA, [Pic]GAbu, [sBu]GA, [Tfb]GAbu, [Tfp]GA, [Tfp]GAbu, 3TzF, 4F3COOHF, 4TzF, 5F3Me3COOHF, 5iPr3COOHF, AspSH, GAbu, GluSH, R2COOPipA, R3COOPipA, S2COOPipA, and S3COOPipA.

561. The agent of any one of the preceding Embodiments, wherein X^6 is selected from [Bn]GA, [iPr]GA, [Me2NPr]GA, [Me2NPr]GAbu, [MeSO2]Dap, [Pfbn]GA, [Tfb]GA, [Tfp]Dap, 1AcAW, 1meH, 1NapA, 2COOHF, 2NapA, 2PyrA, 2Thi, 34FF, 3cbmf, 3COOHF, 3F3MeF, 3FF, 3PyrA, 3thi, 4AmPhe, 4COOHF, 4F3MeF, 4FF, 4PyrA, 6F1NapA, Aad, Ala, aMeDF, Arg, Asn, Asp, B5, Bip, BztA, Cha, Cit,

DaMeL, DGlu, DipA, EtGA, GA, Gln, Glu, His, hLeu, hPhe, Hse, hTyr, Leu, Lys, nLeu, Npg, Pff, Phe, Qui, Ser, tetz, TfeGA, Thr, Trp, Tyr, and Val.

562. The agent of any one of the preceding Embodiments, wherein X^6 comprises a side chain comprising an acid or a polar group.

563. The agent of any one of the preceding Embodiments, wherein X^6 comprises a side chain comprising an acid group.

564. The agent of any one of the preceding Embodiments, wherein X^6 comprises a side chain comprising −COOH or a salt form thereof.

565. The agent of any one of the preceding Embodiments, wherein X^6 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

566. The agent of Embodiment 565, wherein R^{a1} is −H.

567. The agent of any one of Embodiments 565-566, wherein R^{a3} is −H.

568. The agent of any one of Embodiments 565-566, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

569. The agent of any one of Embodiments 565-568, wherein L^{a1} is a covalent bond.

570. The agent of any one of Embodiments 565-569, wherein L^{a2} is a covalent bond.

571. The agent of any one of Embodiments 565-570, wherein R^{a2} is or comprises an acidic or polar group.

572. The agent of any one of Embodiments 565-571, wherein R^{a2} is −L”−COOH.

573. The agent of any one of Embodiments 565-571, wherein R^{a2} is −L”−Cy−COOH.

574. The agent of Embodiment 573, wherein −Cy− is optionally substituted phenylene.

575. The agent of any one of Embodiments 565-571, wherein R^{a2} is $-L''-C(O)N(R')_2$.

576. The agent of any one of Embodiments 572-575, wherein L” is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

577. The agent of any one of Embodiments 572-575, wherein L” is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

578. The agent of any one of Embodiments 572-575, wherein L” is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

579. The agent of any one of Embodiments 572-576, wherein L” is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

580. The agent of any one of Embodiments 572-579, wherein L" is −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

581. The agent of any one of Embodiments 572-578, wherein a methylene unit is replaced with −N(R')−.

582. The agent of Embodiment 581, wherein R' is −H.

583. The agent of Embodiment 581, wherein R' is optionally substituted C_{1-6} alkyl.

584. The agent of any one of the preceding Embodiments, wherein X^6 is TfeGA.

585. The agent of any one of the preceding Embodiments, wherein X^6 is 3COOHF.

586. The agent of any one of the preceding Embodiments, wherein X^6 is 2COOHF.

587. The agent of any one of the preceding Embodiments, wherein X^6 is Asp.

588. The agent of any one of the preceding Embodiments, wherein X^6 is Aad.

589. The agent of any one of Embodiments 1-558, wherein X^6 comprises a side chain comprising a polar group.

590. The agent of any one of Embodiments 1-558, wherein X^6 comprises a side chain comprising −OH.

591. The agent of any one of Embodiments 1-558, wherein X^6 comprises a side chain comprising an amide group.

592. The agent of any one of the preceding Embodiments, wherein X^7 is a hydrophobic amino acid residue.

593. The agent of any one of the preceding Embodiments, wherein X^7 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

594. The agent of any one of the preceding Embodiments, wherein X^7 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$.

595. The agent of any one of the preceding Embodiments, wherein X^7 is $-NH-C(R^{a2})(R^{a3})-C(O)-$.

596. The agent of any one of Embodiments 593-595, wherein R^{a2} and R^{a3} are independently hydrogen or optionally substituted C_{1-10} aliphatic.

597. The agent of any one of Embodiments 593-595, wherein one of R^{a2} and R^{a3} is hydrogen and the other is C_{1-10} aliphatic.

598. The agent of any one of Embodiments 593-595, wherein R^{a2} and R^{a3} are taken together with the carbon atom to which they are attached to form an optionally substituted 3-8 membered ring having 1-3 heteroatoms.

599. The agent of any one of Embodiments 593-595, wherein R^{a2} and R^{a3} are taken together with the carbon atom to which they are attached to form 3-8 membered cycloalkyl.

600. The agent of any one of the preceding Embodiments, wherein X^7 is selected from Ala, Leu, iPrLys, , Phe, Ser, , Aib, Gln, nLeu, Trp, , Ile, and Lys, and a substituted or labeled lysine.

601. The agent of any one of the preceding Embodiments, wherein X^7 is selected from Ala, Leu, iPrLys, [AzAc]Lys, Phe, Ser, [FAM6Ppg][p1TB]Lys, Aib, Gln, nLeu, Trp, [FAM6Ppg][1TriAc]Lys, Ile, and Lys.

602. The agent of any one of the preceding Embodiments, wherein X^7 is selected from Ala, Leu, iPrLys, Phe, Ser, Aib, Gln, nLeu, Trp, Ile, and Lys.

603. The agent of any one of the preceding Embodiments, wherein X^7 is selected from [2OxoPpz]GlnR, [3Py]4SF, [4Pippip]GlnR, [Ac]Lys, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [CF3CO]Lys, [CH2NMe2]4SEF, [EtSO2Ppz]GlnR, [isoindoline]GlnR, [Me2diaminobutane]GlnR, [Me2Npr]Lys, [Me2NPrPip]GlnR, [MeSO2]Lys, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Phc]Lys, [TfePpz]GlnR, Cpg, CyLeu, F2PipNva, hhLeu, Me2Asn, Me2Gln, MeGln, MePpzAsn, Met2O, MorphAsn, MorphNva, [MorphAc]Lys, [mPEG4]Lys, 3COOHF, Aib, Ala, Asn, Asp, Gln, Gly, His, Hse, Ile, iPrLys, Leu, Lys, nLeu, Phe, R5, Ser, Thr, and Trp.

604. The agent of any one of the preceding Embodiments, wherein X^7 is selected from [2OxoPpz]GlnR, [3Py]4SF, [4Pippip]GlnR, [Ac]Lys, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [CF3CO]Lys, [CH2NMe2]4SEF, [EtSO2Ppz]GlnR, [isoindoline]GlnR, [Me2diaminobutane]GlnR, [Me2Npr]Lys, [Me2NPrPip]GlnR, [MeSO2]Lys, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Phc]Lys, [TfePpz]GlnR, Cpg, CyLeu, F2PipNva, hhLeu, Me2Asn, Me2Gln, MeGln, MePpzAsn, Met2O, MorphAsn, and MorphNva.

605. The agent of any one of the preceding Embodiments, wherein X^7 is selected from [MorphAc]Lys, [mPEG4]Lys, 3COOHF, Aib, Ala, Asn, Asp, Gln, Gly, His, Hse, Ile, iPrLys, Leu, Lys, nLeu, Phe, R5, Ser, Thr, and Trp.

606. The agent of any one of the preceding Embodiments, wherein X^7 is Ala.

607. The agent of any one of the preceding Embodiments, wherein X^8 is a hydrophobic amino acid residue.

608. The agent of any one of the preceding Embodiments, wherein X^8 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

609. The agent of any one of the preceding Embodiments, wherein X^8 is $-N(R^{a1})-C(R^{a2})(R^{a3})-C(O)-$.

610. The agent of any one of the preceding Embodiments, wherein X^8 is $-NH-C(R^{a2})(R^{a3})-C(O)-$.

611. The agent of any one of Embodiments 608-610, wherein R^{a2} and R^{a3} are independently hydrogen or optionally substituted C_{1-10} aliphatic.

612. The agent of any one of Embodiments 608-610, wherein one of R^{a2} and R^{a3} is hydrogen and the other is C_{1-10} aliphatic.

613. The agent of any one of Embodiments 608-610, wherein R^{a2} and R^{a3} are taken together with the carbon atom to which they are attached to form an optionally substituted 3-8 membered ring having 1-3 heteroatoms.

614. The agent of any one of Embodiments 608-610, wherein R^{a2} and R^{a3} are taken together with the carbon atom to which they are attached to form 3-8 membered cycloalkyl.

615. The agent of any one of the preceding Embodiments, wherein X^8 is selected from The agent of any one of the preceding Embodiments, wherein X^8 is selected from Ala, Leu, Phe, Ser, Aib, Asp, Glu, Aad, Trp, nLeu, , Gln, , Ile, Lys, iPrLys, and a substituted or labeled lysine.

616. The agent of any one of the preceding Embodiments, wherein X^8 is selected from Ala, Leu, Phe, Ser, Aib, Asp, Glu, Aad, Trp, nLeu, [mPEG2]Lys, [AzAc]Lys, Gln, [FAM6Ppg][1TriAc]Lys, [35CF3PhPr]Lys, [1NapPr]Lys, [22PhPr]Lys, [MorphAc]Lys, [MePipAc]Lys, [MeBipipAc]Lys, [4MePipBz]Lys, [MeMorphBz]Lys, [Me2NCBz]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Bua]Lys, [Oct]Lys, [AdamantC]Lys, [Me3AdamantC]Lys, [AdamantPro]Lys, Ile, Lys, and iPrLys.

617. The agent of any one of the preceding Embodiments, wherein X^8 is Ala.

618. The agent of any one of the preceding Embodiments, wherein X^8 is selected from [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, F2PipAbu, F2PipNva, MePpzAbu, MePpzAsn, MePpzNva, MorphAbu, MorphAsn, MorphNva, dAla, [1NapPr]Lys, [22PhPr]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [AdamantPro]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, 3COOHF, Aad, Aib, Ala, Asp, Gln, Glu, Gly, Ile, iPrLys, Leu, Lys, nLeu, Phe, Ser, and Trp.

619. The agent of any one of the preceding Embodiments, wherein X^8 is selected from [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, F2PipAbu, F2PipNva, MePpzAbu, MePpzAsn, MePpzNva, MorphAbu, MorphAsn, MorphNva, and dAla.

620. The agent of any one of the preceding Embodiments, wherein X^8 is selected from [1NapPr]Lys, [22PhPr]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [AdamantPro]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, 3COOHF, Aad, Aib, Ala, Asp, Gln, Glu, Gly, Ile, iPrLys, Leu, Lys, nLeu, Phe, Ser, and Trp.

621. The agent of any one of the preceding Embodiments, wherein X^9 is selected from Phe, 3F3MeF, 2Thi, 3Thi, 4F3MeF, 3OMeF, 3MeF, 2MeF, 2NapA, 345FF, 34FF, 3FF, Asp, Cha, His, 2FurA, 2PyrA, 4AmPhe, 4FF, CypA, Gln, 1meH, 23FF, 2FF, 35FF, 3CBMF, 3ClF, 3meH, 3PyrA, 4CBMF, 4ClF, 4Thz, Ala, BztA, hPhe, hTyr, MeTyr, nLeu, 1NapA, 2CNF, 3CNF, 4CNF, 4MeF, Bip, DipA, npG, and Phg.

622. The agent of any one of the preceding Embodiments, wherein X^9 is selected from [3Py]4SF,

[CH2NMe2]4SEF, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [MorphCH2]TriAzDap, [SO2MorphCH2]TriAzDap, 2NH2F, 3CH2NMe2F, 3CO2PhF, 3SO2F, 4BrF, Cba, 1meH, 1NapA, 23FF, 2cbmf, 2ClF, 2CNF, 2FF, 2FurA, 2MeF, 2NapA, 2PyrA, 2Thi, 345FF, 34FF, 35FF, 3CBMF, 3ClF, 3CNF, 3COOHF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3Thi, 4AmPhe, 4CBMF, 4ClF, 4CNF, 4F3MeF, 4FF, 4MeF, 4Thz, Ala, Asp, Bip, BztA, Cha, CypA, DipA, Gln, His, hPhe, hTyr, MeTyr, nLeu, Npg, Phe, Phg, Ser, and Tyr.

623. The agent of any one of the preceding Embodiments, wherein X^9 is selected from [3Py]4SF, [CH2NMe2]4SEF, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [MorphCH2]TriAzDap, [SO2MorphCH2]TriAzDap, 2NH2F, 3CH2NMe2F, 3CO2PhF, 3SO2F, 4BrF, and Cba.

624. The agent of any one of the preceding Embodiments, wherein X^9 is selected from 1meH, 1NapA, 23FF, 2cbmf, 2ClF, 2CNF, 2FF, 2FurA, 2MeF, 2NapA, 2PyrA, 2Thi, 345FF, 34FF, 35FF, 3CBMF, 3ClF, 3CNF, 3COOHF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3Thi, 4AmPhe, 4CBMF, 4ClF, 4CNF, 4F3MeF, 4FF, 4MeF, 4Thz, Ala, Asp, Bip, BztA, Cha, CypA, DipA, Gln, His, hPhe, hTyr, MeTyr, nLeu, Npg, Phe, Phg, Ser, and Tyr.

625. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group.

626. The agent of any one of the preceding Embodiments, wherein X^9 is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

627. The agent of Embodiment 626, wherein R^{a1} is $-H$.

628. The agent of any one of Embodiments 626-627, wherein R^{a3} is $-H$.

629. The agent of any one of Embodiments 626-627, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

630. The agent of any one of Embodiments 626-629, wherein L^{a1} is a covalent bond.

631. The agent of any one of Embodiments 626-630, wherein R^{a2} is $-L^a-R$, wherein R is or comprises an aromatic group.

632. The agent of Embodiment 631, wherein R is optionally substituted 6-10 membered aryl.

633. The agent of Embodiment 631, wherein R is optionally substituted phenyl.

634. The agent of Embodiment 631, wherein R is phenyl.

635. The agent of Embodiment 631, wherein R is optionally substituted naphthyl.

636. The agent of Embodiment 631, wherein R is naphthyl.

637. The agent of Embodiment 631, wherein R is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms.

638. The agent of Embodiment 631, wherein R is optionally substituted 6-membered heteroaryl having 1-4 heteroatoms.

639. The agent of Embodiment 631, wherein R is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms.

640. The agent of Embodiment 631, wherein R is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms.

641. The agent of any one of Embodiments 637-640, wherein a heteroatom is nitrogen.

642. The agent of any one of Embodiments 637-641, wherein a heteroatom is oxygen.

643. The agent of any one of Embodiments 637-642, wherein a heteroatom is sulfur.

644. The agent of any one of Embodiments 637-640, wherein the heteroaryl has only one heteroatom.

645. The agent of Embodiment 644, wherein the heteroatom is nitrogen.

646. The agent of Embodiment 644, wherein the heteroatom is oxygen.

647. The agent of Embodiment 644, wherein the heteroatom is sulfur.

648. The agent of any one of Embodiments 631-647, wherein L^a is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

649. The agent of any one of Embodiments 631-647, wherein L^a is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

650. The agent of any one of Embodiments 631-647, wherein L^a is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

651. The agent of Embodiment 648, wherein L^a is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

652. The agent of Embodiment 648, wherein L^a is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

653. The agent of Embodiment 648, wherein L^a is $-CH_2-$.

654. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, −OR, −R, $-N(R)_2$, $-C(O)N(R)_2$, or −CN, wherein each R is independently −H, C_{1-4} alkyl or haloalkyl, or −Ph.

655. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, −OR, −R, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently C_{1-4} alkyl or haloalkyl.

656. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic

group is independently selected from halogen, −OR, −R, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently C_{1-2} alkyl or haloalkyl.

657. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, −OR, −R, NH_2, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more halogen.

658. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from −F, −OR, $-CH_3$, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more −F.

659. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from −F, −OR, $-CH_3$, $-CF_3$, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN.

660. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, $-CH_3$, $-CF_3$, or −CN.

661. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an optionally substituted aromatic group optionally substituted at 2'-position.

662. The agent of any one of the preceding Embodiments, wherein X^9 comprises a side chain which is or comprises an unsubstituted aromatic group.

663. The agent of any one of the preceding Embodiments, wherein X^9 is Phe.

664. The agent of any one of the preceding Embodiments, wherein X^{10} is selected from Asn, Val, Gln, Leu, Thr, Ser, Phe, Ala, Hse, Cit, iPrLys, S7, S5, Cha, PyrS, S(Ome), [AzAc]Lys, nLeu, 2F3MeF, 3F3MeF, and 4F3MeF.

665. The agent of any one of the preceding Embodiments, wherein X^{10} is selected from [4MePpzPip]GlnR, [4Pippip]GlnR, [4PyPip]GlnR, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [H4IAP]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [MorphCH2]TriAzDap, [NHBn]GlnR, [Ppz]GlnR, [RDMAPyr]GlnR, [SO2MorphCH2]TriAzDap, [TfePpz]GlnR, 4BrF, AcLys, F2PipNva, Me2Asn, Me2Gln, MePpzAsn, MorphAsn, MorphGln, MorphNva, MeAsn, 2F3MeF, 3F3MeF, 4F3MeF, Abu, Ala, Arg, Asn, Cha, Cit, dSer, Gln, His, hLeu, Hse, iPrLys, Leu, Lys, nLeu, Npg, Phe, PyrS, PyrS2, R5, S(Ome), S5, S7, Ser, Thr, Trp, and Val.

666. The agent of any one of the preceding Embodiments, wherein X^{10} is selected from [4MePpzPip]GlnR, [4Pippip]GlnR, [4PyPip]GlnR, [CH2NMe2]TriAzDap, [CH2Ppz]TriAzDap, [H4IAP]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [MorphCH2]TriAzDap, [NHBn]GlnR, [Ppz]GlnR,

[RDMAPyr]GlnR, [SO2MorphCH2]TriAzDap, [TfePpz]GlnR, 4BrF, AcLys, F2PipNva, Me2Asn, Me2Gln, MePpzAsn, MorphAsn, MorphGln, MorphNva, and MeAsn.

667. The agent of any one of the preceding Embodiments, wherein X^{10} is selected from 2F3MeF, 3F3MeF, 4F3MeF, Abu, Ala, Arg, Asn, Cha, Cit, dSer, Gln, His, hLeu, Hse, iPrLys, Leu, Lys, nLeu, Npg, Phe, PyrS, PyrS2, R5, S(Ome), S5, S7, Ser, Thr, Trp, and Val.

668. The agent of any one of the preceding Embodiments, wherein X^{10} comprises a side chain comprising a polar group.

669. The agent of any one of the preceding Embodiments, wherein X^{10} comprises a side chain comprising −OH.

670. The agent of any one of the preceding Embodiments, wherein X^{10} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

671. The agent of Embodiment 670, wherein R^{a1} is −H.

672. The agent of any one of Embodiments 670-671, wherein R^{a3} is −H.

673. The agent of any one of Embodiments 670-671, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

674. The agent of any one of Embodiments 670-673, wherein L^{a1} is a covalent bond.

675. The agent of any one of Embodiments 670-674, wherein L^{a2} is a covalent bond.

676. The agent of any one of Embodiments 670-675, wherein R^{a2} is −L”−R.

677. The agent of any one of Embodiments 670-675, wherein R^{a2} is −L”−Cy−R.

678. The agent of any one of Embodiments 676-677, wherein R is hydrogen or optionally substituted C_{1-10} aliphatic.

679. The agent of any one of Embodiments 676-677, wherein R is optionally substituted C_{1-10} aliphatic.

680. The agent of any one of Embodiments 676-677, wherein R is C_{1-10} aliphatic.

681. The agent of any one of Embodiments 676-677, wherein R is C_{1-10} alkyl.

682. The agent of any one of Embodiments 676-677, wherein R is optionally substituted phenyl.

683. The agent of any one of Embodiments 670-675, R^{a2} is $-L”-C(O)N(R’)_2$.

684. The agent of any one of Embodiments 670-675, R^{a2} is −L”−OH.

685. The agent of any one of Embodiments 670-684, wherein L” is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

686. The agent of any one of Embodiments 670-684, wherein L" is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

687. The agent of any one of Embodiments 670-684, wherein L" is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

688. The agent of any one of Embodiments 670-684, wherein L" is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

689. The agent of any one of Embodiments 670-684, wherein L" is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

690. The agent of any one of the preceding Embodiments, wherein X^{10} is Leu, Thr or Hse.

691. The agent of any one of Embodiments 1-664, wherein X^{10} comprises a side chain comprising an amide group.

692. The agent of any one of Embodiments 1-664, wherein X^{10} comprises a hydrophobic side chain.

693. The agent of any one of Embodiments 1-664, wherein X^{10} comprises a hydrocarbon side chain.

694. The agent of Embodiment 693, wherein X^{10} is Leu.

695. The agent of any one of Embodiments 1-664, wherein X^{10} comprises a side chain comprising an optionally substituted aromatic group.

696. The agent of Embodiment 695, wherein the aromatic group is optionally substituted phenyl.

697. The agent of Embodiment 695, wherein X^{10} is Phe.

698. The agent of any one of the preceding Embodiments, wherein X^{11} is selected from S8, PyrS2, PyrS, S7, PyrS3, SeN, Ala, Az, Phe, S4, S6, SdN, S10, S5, SgN, and PyrS1.

699. The agent of any one of the preceding Embodiments, wherein X^{11} is selected from Az2, Az3, PyrR2, PyrS4, SeNc5, SPip1, SPip2, SPip3, Aib, Ala, Az, Leu, Phe, PyrS, PyrS1, PyrS2, PyrS3, S10, S4, S5, S6, S7, S8, SdN, SeN, and SgN.

700. The agent of any one of the preceding Embodiments, wherein X^{11} is selected from Az2, Az3, PyrR2, PyrS4, SeNc5, SPip1, SPip2, and SPip3.

701. The agent of any one of the preceding Embodiments, wherein X^{11} is selected from Aib, Ala, Az, Leu, Phe, PyrS, PyrS1, PyrS2, PyrS3, S10, S4, S5, S6, S7, S8, SdN, SeN, and SgN.

702. The agent of any one of the preceding Embodiments, wherein X^{11} is stapled with X^4.

703. The agent of Embodiment 702, wherein X^{11} is PyrS2.

704. The agent of Embodiment 702, wherein X^{11} is PyrS3.

705. The agent of Embodiment 702, wherein X^{11} is S8.

706. The agent of any one of Embodiments 1-698, wherein X^{11} is not stapled.

707. The agent of Embodiment 705, wherein X^{11} is Ala or Phe.

708. The agent of any one of the preceding Embodiments, wherein X^{12} is selected from Phe, 3Thi, 2ClF, 3FF, 2OMeF, 2FF, Pff, Asp, 2CBMF, 3ClF, 3F3MeF, 1NapA, 2NapA, 2PyrA, 4CBMF, 4COOHF, 4F3MeF, Tyr, 2BrF, 2F3MeF, 2Thi, 4PyrA, Cha, CypA, hPhe, Trp, dPhe, [Acryl]Dap, 1meH, 23FF, 2MeF, 34FF, 3OMeF, 3PyrA, 4ClF, 4CNF, Ala, Glu, His, 2CNF, 2NO2F, 35FF, 3CBMF, 3CNF, 3MeF, 3meH, 4FF, 4MeF, 4Thz, Asn, BztA, and hTyr.

709. The agent of any one of the preceding Embodiments, wherein X^{12} is selected from [CyPr]-3SF, [Ph]3SF, [Ph]-3SF, 3BrF, 3CBMF, Cba, [Acryl]Dap, 1meH, 1NapA, 23FF, 2BrF, 2CBMF, 2ClF, 2CNF, 2F3MeF, 2FF, 2MeF, 2NapA, 2NO2F, 2OMeF, 2pyrA, 2Thi, 34FF, 35FF, 3ClF, 3CNF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3thi, 4CBMF, 4ClF, 4CNF, 4COOHF, 4F3MeF, 4FF, 4MeF, 4PyrA, 4Thz, Ala, Asn, Asp, BztA, Cha, CypA, dPhe, Gln, Glu, His, hPhe, hTyr, Leu, Npg, Pff, Phe, PyrS2, Trp, and Tyr.

710. The agent of any one of the preceding Embodiments, wherein X^{12} is selected from [CyPr]-3SF, [Ph]3SF, [Ph]-3SF, 3BrF, 3CBMF, and Cba.

711. The agent of any one of the preceding Embodiments, wherein X^{12} is selected from [Acryl]Dap, 1meH, 1NapA, 23FF, 2BrF, 2CBMF, 2ClF, 2CNF, 2F3MeF, 2FF, 2MeF, 2NapA, 2NO2F, 2OMeF, 2pyrA, 2Thi, 34FF, 35FF, 3ClF, 3CNF, 3F3MeF, 3FF, 3MeF, 3meH, 3OMeF, 3PyrA, 3thi, 4CBMF, 4ClF, 4CNF, 4COOHF, 4F3MeF, 4FF, 4MeF, 4PyrA, 4Thz, Ala, Asn, Asp, BztA, Cha, CypA, dPhe, Gln, Glu, His, hPhe, hTyr, Leu, Npg, Pff, Phe, PyrS2, Trp, and Tyr.

712. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group.

713. The agent of any one of the preceding Embodiments, wherein X^{12} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

714. The agent of Embodiment 713, wherein R^{a1} is $-H$.

715. The agent of any one of Embodiments 713-714, wherein R^{a3} is $-H$.

716. The agent of any one of Embodiments 713-714, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

717. The agent of any one of Embodiments 713-716, wherein L^{a1} is a covalent bond.

718. The agent of any one of Embodiments 713-717, wherein R^{a2} is $-L^{a}-R$, wherein R is or comprises an aromatic group.

719. The agent of Embodiment 718, wherein R is optionally substituted 6-10 membered aryl

720. The agent of Embodiment 718, wherein R is optionally substituted phenyl

721. The agent of Embodiment 718, wherein R is phenyl

722. The agent of Embodiment 718, wherein R is optionally substituted naphthyl

723. The agent of Embodiment 718, wherein R is naphthyl

724. The agent of Embodiment 718, wherein R is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms

725. The agent of Embodiment 718, wherein R is optionally substituted 6-membered heteroaryl having 1-4 heteroatoms

726. The agent of Embodiment 718, wherein R is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms

727. The agent of Embodiment 718, wherein R is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms

728. The agent of any one of Embodiments 724-727, wherein a heteroatom is nitrogen

729. The agent of any one of Embodiments 724-728, wherein a heteroatom is oxygen

730. The agent of any one of Embodiments 724-729, wherein a heteroatom is sulfur

731. The agent of any one of Embodiments 724-727, wherein the heteroaryl has only one heteroatom

732. The agent of Embodiment 731, wherein the heteroatom is nitrogen.

733. The agent of Embodiment 731, wherein the heteroatom is oxygen.

734. The agent of Embodiment 731, wherein the heteroatom is sulfur.

735. The agent of any one of Embodiments 718-734, wherein L^a is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

736. The agent of any one of Embodiments 718-734, wherein L^a is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

737. The agent of any one of Embodiments 718-734, wherein L^a is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

738. The agent of Embodiment 735, wherein L^a is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

739. The agent of Embodiment 735, wherein L^a is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

740. The agent of Embodiment 735, wherein L^a is $-CH_2-$.

741. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, −OR, −R, $-N(R)_2$, $-C(O)N(R)_2$, or −CN, wherein each R is independently −H, C_{1-4} alkyl or haloalkyl, or −Ph.

742. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, −OR, −R, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently C_{1-4} alkyl or haloalkyl.

743. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, −OR, −R, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently C_{1-2} alkyl or haloalkyl.

744. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, −OR, −R, NH_2, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more halogen.

745. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from −F, −OR, $-CH_3$, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN, wherein each R is independently methyl optionally substituted with one or more −F.

746. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from −F, −OR, $-CH_3$, $-CF_3$, $-NH_2$, $-C(O)NH_2$, −Ph, or −CN.

747. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group, wherein each optional substituent of the aromatic group is independently selected from halogen, $-CH_3$, $-CF_3$, or −CN.

748. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an optionally substituted aromatic group optionally substituted at 2'-position.

749. The agent of any one of the preceding Embodiments, wherein X^{12} comprises a side chain which is or comprises an unsubstituted aromatic group.

750. The agent of any one of Embodiments 741-749, wherein the aromatic group is a 5-membered heteroaryl group.

751. The agent of any one of the preceding Embodiments, wherein X^{12} is 3Thi.

752. The agent of any one of Embodiments 741-749, wherein the aromatic group is a phenyl group.

753. The agent of any one of Embodiment 752, wherein X^{12} is 2ClF.

754. The agent of any one of Embodiment 752, wherein X^{12} is Phe.

755. The agent of any one of Embodiment 752, wherein X^{12} is Phe wherein the phenyl is 2'-substituted.

756. The agent of any one of Embodiment 752, wherein X^{12} is 2FF, 2ClF, 2BrF, 2F3MeF, 2MeF, or 2CNF.

757. The agent of any one of the preceding Embodiments, wherein X^{13} is selected from BztA, Trp, 2NapA, 1NapA, WCHO, 5CpW, 5FW, Ala, aMeW, H2Trp, His, Phe, 23FF, 34FF, 34OMeF, 1MeW, 5CF3W, 5ClW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, Bip, and Qui.

758. The agent of any one of the preceding Embodiments, wherein X^{13} is selected from 2F3MeW, 34ClF, 34MeF, 3Br4FF, 3BrF, 4ClBztA, 4ClW, 4FW, 5IndA, 7AzaW, 7ClBztA, 7FBztA, Cba, RbMe2NapA, RbMeBztA, SbMe2NapA, SbMeBztA, 1MeW, 1NapA, 23FF, 2F3MeF, 2NapA, 34FF, 34OMeF, 3ClF, 3Thi, 4ClF, 5CF3W, 5ClW, 5CpW, 5FW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, Ala, aMeW, Bip, BztA, Cha, H2Trp, His, Phe, PyrS2, Qui, Trp, Tyr, and WCHO.

759. The agent of any one of the preceding Embodiments, wherein X^{13} is selected from 2F3MeW, 34ClF, 34MeF, 3Br4FF, 3BrF, 4ClBztA, 4ClW, 4FW, 5IndA, 7AzaW, 7ClBztA, 7FBztA, Cba, RbMe2NapA, RbMeBztA, SbMe2NapA, and SbMeBztA.

760. The agent of any one of the preceding Embodiments, wherein X^{13} is selected from 1MeW, 1NapA, 23FF, 2F3MeF, 2NapA, 34FF, 34OMeF, 3ClF, 3Thi, 4ClF, 5CF3W, 5ClW, 5CpW, 5FW, 5MeOW, 6ClW, 6F1NapA, 7F1NapA, 7FW, Ala, aMeW, Bip, BztA, Cha, H2Trp, His, Phe, PyrS2, Qui, Trp, Tyr, and WCHO.

761. The agent any one of the preceding Embodiments, wherein the side chain of X^{13} comprises an optionally substituted aromatic group.

762. The agent of any one of the preceding Embodiments, wherein X^{13} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

763. The agent of Embodiment 762, wherein R^{a1} is $-H$.

764. The agent of any one of Embodiments 762-763, wherein R^{a3} is $-H$.

765. The agent of any one of Embodiments 762-763, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

766. The agent of any one of Embodiments 762-765, wherein L^{a1} is a covalent bond

767. The agent of any one of Embodiments 762-766, wherein R^{a2} is $-L^{a}-R$, wherein R is or comprises an aromatic group.

768. The agent of Embodiment 767, wherein R is optionally substituted 6-10 membered aryl.

769. The agent of Embodiment 767, wherein R is optionally substituted phenyl.

770. The agent of Embodiment 767, wherein R is phenyl.

771. The agent of Embodiment 767, wherein R is optionally substituted naphthyl.

772. The agent of Embodiment 767, wherein R is naphthyl.

773. The agent of Embodiment 767, wherein R is optionally substituted 5-membered heteroaryl having 1-4 heteroatoms.

774. The agent of Embodiment 767, wherein R is optionally substituted 6-membered heteroaryl having 1-4 heteroatoms.

775. The agent of Embodiment 767, wherein R is optionally substituted 9-membered bicyclic heteroaryl having 1-4 heteroatoms.

776. The agent of Embodiment 767, wherein R is optionally substituted 10-membered bicyclic heteroaryl having 1-4 heteroatoms.

777. The agent of any one of Embodiments 773-776, wherein a heteroatom is nitrogen.

778. The agent of any one of Embodiments 773-776, wherein a heteroatom is oxygen.

779. The agent of any one of Embodiments 773-776, wherein a heteroatom is sulfur.

780. The agent of any one of Embodiments 773-776, wherein the heteroaryl has only one heteroatom.

781. The agent of Embodiment 780, wherein the heteroatom is nitrogen.

782. The agent of Embodiment 780, wherein the heteroatom is oxygen.

783. The agent of Embodiment 780, wherein the heteroatom is sulfur.

784. The agent of any one of Embodiments 767-783, wherein L^a is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

785. The agent of any one of Embodiments 767-783, wherein L^a is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

786. The agent of any one of Embodiments 767-783, wherein L^a is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

787. The agent of Embodiment 784, wherein L^a is optionally substituted $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

788. The agent of Embodiment 784, wherein L^a is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

789. The agent of Embodiment 784, wherein L^a is $-CH_2-$.

790. The agent any one of the preceding Embodiments, wherein the side chain of X^{13} comprises an optionally substituted 8-10 membered bicyclic aromatic group.

791. The agent any one of the preceding Embodiments, wherein the side chain of X^{13} comprises an optionally substituted 9-membered bicyclic heteroaryl group having 1-3 heteroatoms.

792. The agent of any one of the preceding Embodiments, wherein X^{13} is BtzA.

793. The agent of any one of Embodiments 1-791, wherein X^{13} is Trp.

794. The agent of any one of Embodiments 1-791, wherein X^{13} is 1NapA.

795. The agent of any one of Embodiments 1-791, wherein X^{13} is 2NapA.

796. The agent of any one of the preceding Embodiments, wherein p14 is 1.

797. The agent of any one of the preceding Embodiments, wherein X^{14} is selected from Gln, His, Ser, dThr, Thr, Ala, Hse, Asn, Leu, Aib, Alaol, Throl, Leuol, dAsn, dGln, dHis, Tyr, [AzAc]Lys, 1MeH, 3MeH, 4TriA, dSer, NMeHis, NMeS, Pro, Trp, Val, Lys, MorphAla, 2FurA, Abu, Arg, Dab, iPrLys, Phe, Pheol, and Prool.

798. The agent of any one of the preceding Embodiments, wherein X^{14} is selected from [3C]TriAzLys, [4F3CPip]GlnR, [4MePpzPip]GlnR, [4Pippip]GlnR, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Pip]GlnR, [PropynPEG14]Lys, [RDMAPyr]GlnR, [TfePpz]GlnR, AcLys, BnBoroleK, F2PipNva, GlnR, Me2Asn, Me2Gln, MePpzAsn, Met2O, MorphAsn, MorphGln, MorphNva, dAla, MeAsn, 1MeH, 2cbmf, 2F3MeF, 2FurA, 3cbmf, 3MeH, 4TriA, Abu, Aib, Ala, Alaol, Arg, Asn, Asp, BztA, Cha, Dab, dAsn, dGln, dHis, dSer, dThr, Gln, His, Hse, iPrLys, Leu, Leuol, Lys, MorphAla, NMeHis, NMeS, Npg, Phe, Pheol, Pro, Prool, PyrS2, S5, Ser, Thr, Throl, Trp, Tyr, and Val.

799. The agent of any one of the preceding Embodiments, wherein X^{14} is selected from [3C]TriAzLys, [4F3CPip]GlnR, [4MePpzPip]GlnR, [4Pippip]GlnR, [AcPpz]GlnR, [bismethoxyethylamine]GlnR, [Me2NPrPip]GlnR, [Morph]GlnR, [NHEt]GlnR, [NMe2]GlnR, [Pip]GlnR, [PropynPEG14]Lys, [RDMAPyr]GlnR, [TfePpz]GlnR, AcLys, BnBoroleK, F2PipNva, GlnR, Me2Asn, Me2Gln, MePpzAsn, Met2O, MorphAsn, MorphGln, MorphNva, dAla, and MeAsn.

800. The agent of any one of the preceding Embodiments, wherein X^{14} is selected from 1MeH, 2cbmf, 2F3MeF, 2FurA, 3cbmf, 3MeH, 4TriA, Abu, Aib, Ala, Alaol, Arg, Asn, Asp, BztA, Cha, Dab, dAsn, dGln, dHis, dSer, dThr, Gln, His, Hse, iPrLys, Leu, Leuol, Lys, MorphAla, NMeHis, NMeS, Npg, Phe, Pheol, Pro, Prool, PyrS2, S5, Ser, Thr, Throl, Trp, Tyr, and Val.

801. The agent of any one of the preceding Embodiments, wherein X^{14} comprises a side chain comprising a polar group.

802. The agent of any one of the preceding Embodiments, wherein X^{14} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

803. The agent of Embodiment 802, wherein R^{a1} is $-H$.

804. The agent of any one of Embodiments 802-803, wherein R^{a3} is $-H$.

805. The agent of any one of Embodiments 802-803, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

806. The agent of any one of Embodiments 802-805, wherein L^{a1} is a covalent bond.

807. The agent of any one of Embodiments 802-806, wherein L^{a2} is a covalent bond.

808. The agent of any one of Embodiments 802-807, wherein R^{a2} is −L”−R.

809. The agent of any one of Embodiments 802-807, wherein R^{a2} is −L”−Cy−R.

810. The agent of any one of Embodiments 802-807, wherein R^{a2} is −L”−C(O)OR.

811. The agent of any one of Embodiments 802-807, wherein R^{a2} is −L”−C(O)N(R’)$_2$.

812. The agent of any one of Embodiments 802-807, wherein R^{a2} is −L”−C(O)N(R)$_2$.

813. The agent of any one of Embodiments 804-812, wherein R is hydrogen or optionally substituted C_{1-10} aliphatic.

814. The agent of any one of Embodiments 804-812, wherein R is hydrogen.

815. The agent of any one of Embodiments 804-812, wherein R is optionally substituted C_{1-10} aliphatic.

816. The agent of any one of Embodiments 804-812, wherein R is C_{1-10} aliphatic.

817. The agent of any one of Embodiments 804-812, wherein R is C_{1-10} alkyl.

818. The agent of any one of Embodiments 802-807, wherein R^{a2} is −L”−OH.

819. The agent of any one of Embodiments 802-818, wherein L” is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

820. The agent of any one of Embodiments 802-818, wherein L” is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

821. The agent of any one of Embodiments 802-818, wherein L” is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R’)−, −C(O)−, −C(O)N(R’)−, or −N(R’)C(O)O−.

822. The agent of any one of Embodiments 802-818, wherein L” is optionally substituted −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

823. The agent of any one of Embodiments 802-818, wherein L” is −(CH_2)n− wherein n is 1, 2, 3, 4, 5, or 6.

824. The agent of any one of the preceding Embodiments, wherein X^{14} comprises a side chain comprising −OH.

825. The agent of any one of the preceding Embodiments, wherein X^{14} comprises a side chain comprising an amide group.

826. The agent of any one of the preceding Embodiments, wherein X^{14} is Gln.

827. The agent of any one of Embodiments 1-792, wherein p14 is 0.

828. The agent of any one of the preceding Embodiments, wherein p15 is 1.

829. The agent of any one of the preceding Embodiments, wherein X^{15} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

830. The agent of Embodiment 829, wherein R^{a1} is $-H$.

831. The agent of any one of Embodiments 829-830, wherein R^{a3} is $-H$.

832. The agent of any one of Embodiments 829-830, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

833. The agent of any one of Embodiments 829-832, wherein L^{a1} is a covalent bond.

834. The agent of any one of Embodiments 829-833, wherein L^{a2} is a covalent bond.

835. The agent of any one of Embodiments 829-834, wherein R^{a2} is $-L''-R$.

836. The agent of any one of Embodiments 829-834, wherein R^{a2} is $-L''-Cy-R$.

837. The agent of any one of Embodiments 829-834, wherein R^{a2} is $-L''-C(O)OR$.

838. The agent of any one of Embodiments 829-834, wherein R^{a2} is $-L''-C(O)N(R')_2$.

839. The agent of any one of Embodiments 829-834, wherein R^{a2} is $-L''-C(O)N(R)_2$.

840. The agent of any one of Embodiments 835-839, wherein R is hydrogen or optionally substituted C_{1-10} aliphatic.

841. The agent of any one of Embodiments 835-839, wherein R is hydrogen.

842. The agent of any one of Embodiments 835-839, wherein R is optionally substituted C_{1-10} aliphatic.

843. The agent of any one of Embodiments 835-839, wherein R is C_{1-10} aliphatic.

844. The agent of any one of Embodiments 835-839, wherein R is C_{1-10} alkyl.

845. The agent of any one of Embodiments 829-834, wherein R^{a2} is $-L''-OH$.

846. The agent of any one of Embodiments 829-845, wherein L'' is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-Cy-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

847. The agent of any one of Embodiments 829-845, wherein L'' is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-Cy-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

848. The agent of any one of Embodiments 829-845, wherein L'' is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

849. The agent of any one of Embodiments 829-845, wherein L" is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

850. The agent of any one of Embodiments 829-845, wherein L" is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

851. The agent of any one of the preceding Embodiments, wherein X^{15} is selected from 6AmHex, 6AzHex, Aib, Ala, dAla, dIle, Ile, and Lys.

852. The agent of any one of the preceding Embodiments, wherein X^{15} is selected from [1Napc]Lys, [1NapPr]Lys, [22PhPr]Lys, [2Napc]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [AzAc]Lys, [Bua]Lys, [Me2NCBz]Lys, [Me3AdamantC]Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, [PropynPEG1]Lys, [PropynPEG2]Lys, [PropynPEG3]Lys, [PropynPEG4]Lys, 6AmHex, 6AzHex, Aib, Ala, dAla, dIle, Ile, and Lys.

853. The agent of any one of the preceding Embodiments, wherein X^{15} is selected from [3C]TriAzdLys, [3C]TriAzLys, [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, [PropynPEG14]Lys, dAla, dIle, [1Napc]Lys, [1NapPr]Lys, [22PhPr]Lys, [2Napc]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, [PropynPEG1]Lys, [PropynPEG2]Lys, [PropynPEG3]Lys, [PropynPEG4]Lys, 6AmHex, Aib, Ala, Alaol, BztA, Gln, Ile, Leuol, Leu, Lys, NEt2, NHBn, NHCyHe, NHCyPr, NHEt, OH, Phe, Pheol, Prool, Throl, and Val.

854. The agent of any one of the preceding Embodiments, wherein X^{15} is selected from [3C]TriAzdLys, [3C]TriAzLys, [lithocholate]-Lys, [lithocholate-PEG2]-Lys, [Me2NCBz]Lys, [Me3AdamantC-PEG2]-Lys, [PropynPEG14]Lys, dAla, and dIle.

855. The agent of any one of the preceding Embodiments, wherein X^{15} is selected from [1Napc]Lys, [1NapPr]Lys, [22PhPr]Lys, [2Napc]Lys, [35CF3PhPr]Lys, [4MePipBz]Lys, [AdamantC]Lys, [Bua]Lys, [Me3AdamantC]Lys, [Me3AdamantC]-Lys, [MeBipipAc]Lys, [MeMorphBz]Lys, [MePipAc]Lys, [MorphAc]Lys, [mPEG2]Lys, [mPEG4]Lys, [mPEG6]Lys, [mPEG8]Lys, [Oct]Lys, [PropynPEG1]Lys, [PropynPEG2]Lys, [PropynPEG3]Lys, [PropynPEG4]Lys, 6AmHex, Aib, Ala, Alaol, BztA, Gln, Ile, Leuol, Leu, Lys, NEt2, NHBn, NHCyHe, NHCyPr, NHEt, OH, Phe, Pheol, Prool, Throl, and Val.

856. The agent of any one of the preceding Embodiments, wherein X^{15} comprises a hydrophobic side chain.

857. The agent of any one of the preceding Embodiments, wherein the side chain of X^{15} is C_{1-10} alkyl.

858. The agent of any one of Embodiments 1-852, wherein X^{15} is optionally substituted or labeled Lys.

859. The agent of any one of Embodiments 1-827, wherein p15 is 0.

860. The agent of any one of the preceding Embodiments, wherein p16 is 1.

861. The agent of any one of the preceding Embodiments, wherein X^{16} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

862. The agent of Embodiment 861, wherein R^{a1} is $-H$.

863. The agent of any one of Embodiments 861-862, wherein R^{a3} is $-H$.

864. The agent of any one of Embodiments 861-862, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

865. The agent of any one of Embodiments 861-864, wherein L^{a1} is a covalent bond.

866. The agent of any one of Embodiments 861-865, wherein L^{a2} is a covalent bond.

867. The agent of any one of Embodiments 861-866, wherein R^{a2} is $-L"-R$.

868. The agent of any one of Embodiments 861-866, wherein R^{a2} is $-L"-Cy-R$.

869. The agent of any one of Embodiments 861-866, wherein R^{a2} is $-L"-C(O)OR$.

870. The agent of any one of Embodiments 861-866, wherein R^{a2} is $-L"-C(O)N(R')_2$.

871. The agent of any one of Embodiments 861-866, wherein R^{a2} is $-L"-C(O)N(R)_2$.

872. The agent of any one of Embodiments 867-871, wherein R is hydrogen or optionally substituted C_{1-10} aliphatic.

873. The agent of any one of Embodiments 867-871, wherein R is hydrogen.

874. The agent of any one of Embodiments 867-871, wherein R is optionally substituted C_{1-10} aliphatic.

875. The agent of any one of Embodiments 867-871, wherein R is C_{1-10} aliphatic.

876. The agent of any one of Embodiments 867-871, wherein R is C_{1-10} alkyl.

877. The agent of any one of Embodiments 861-866, wherein R^{a2} is $-L"-OH$.

878. The agent of any one of Embodiments 861-877, wherein L" is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-Cy-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

879. The agent of any one of Embodiments 861-877, wherein L" is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-Cy-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

880. The agent of any one of Embodiments 861-877, wherein L" is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

881. The agent of any one of Embodiments 861-877, wherein L" is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

882. The agent of any one of Embodiments 861-877, wherein L" is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

883. The agent of any one of the preceding Embodiments, wherein X^{16} is selected from Ala and dAla.

884. The agent of any one of the preceding Embodiments, wherein X^{16} is selected from Cbg, Cpg, CyLeu, dLeu, dAla, Aib, Ala, Arg, Asn, dGln, dThr, Gln, Ile, Leu, nLeu, Phe, Ser, Thr, Trp, Tyr, and Val.

885. The agent of any one of the preceding Embodiments, wherein X^{16} is selected from Cbg, Cpg, CyLeu, dLeu, and dAla.

886. The agent of any one of the preceding Embodiments, wherein X^{16} is selected from Aib, Ala, Arg, Asn, dGln, dThr, Gln, Ile, Leu, nLeu, Phe, Ser, Thr, Trp, Tyr, and Val.

887. The agent of any one of Embodiments 1-859, wherein p16 is 0.

888. The agent of any one of the preceding Embodiments, wherein p17 is 1.

889. The agent of any one of the preceding Embodiments, wherein X^{17} is $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)-$.

890. The agent of Embodiment 889, wherein R^{a1} is −H.

891. The agent of any one of Embodiments 889-890, wherein R^{a3} is −H.

892. The agent of any one of Embodiments 889-890, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

893. The agent of any one of Embodiments 889-892, wherein L^{a1} is a covalent bond.

894. The agent of any one of Embodiments 889-893, wherein L^{a2} is a covalent bond.

895. The agent of any one of Embodiments 889-894, wherein R^{a2} is −L"−R.

896. The agent of any one of Embodiments 889-894, wherein R^{a2} is −L"−Cy−R.

897. The agent of any one of Embodiments 889-894, wherein R^{a2} is −L"−C(O)OR.

898. The agent of any one of Embodiments 889-894, wherein R^{a2} is $-L"-C(O)N(R')_2$.

899. The agent of any one of Embodiments 889-894, wherein R^{a2} is $-L"-C(O)N(R)_2$.

900. The agent of any one of Embodiments 895-899, wherein R is hydrogen or optionally substituted C_{1-10} aliphatic.

901. The agent of any one of Embodiments 895-899, wherein R is hydrogen.

902. The agent of any one of Embodiments 895-899, wherein R is optionally substituted C_{1-10} aliphatic.

903. The agent of any one of Embodiments 895-899, wherein R is C_{1-10} aliphatic.

904. The agent of any one of Embodiments 895-899, wherein R is C_{1-10} alkyl.

905. The agent of any one of Embodiments 889-894, wherein R^{a2} is −L"−OH.

906. The agent of any one of Embodiments 889-905, wherein L" is a covalent bond or an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

907. The agent of any one of Embodiments 889-905, wherein L" is an optionally substituted bivalent C_{1-10} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −Cy−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

908. The agent of any one of Embodiments 889-905, wherein L" is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

909. The agent of any one of Embodiments 889-905, wherein L" is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −C(O)N(R')−, or −N(R')C(O)O−.

910. The agent of any one of Embodiments 889-905, wherein L" is $-(CH_2)n-$ wherein n is 1, 2, 3, 4, 5, or 6.

911. The agent of any one of the preceding Embodiments, wherein X^{17} is selected from Ala and dAla.

912. The agent of any one of Embodiments 1-859, wherein p17 is 0.

913. The agent of any one of the preceding Embodiments, wherein p18 is 1.

914. The agent of any one of the preceding Embodiments, wherein X^{18} comprises a hydrophobic side chain.

915. The agent of any one of the preceding Embodiments, wherein X^{18} is selected from Aib, Ala, and Leu.

916. The agent of any one of the preceding Embodiments, wherein p18 is 0.

917. The agent of any one of the preceding Embodiments, wherein p19 is 1.

918. The agent of any one of the preceding Embodiments, wherein X^{19} comprises a hydrophobic side chain.

919. The agent of any one of the preceding Embodiments, wherein X^{19} is selected from Aib, Ala, and Leu.

920. The agent of any one of the preceding Embodiments, wherein p19 is 0.

921. The agent of any one of the preceding Embodiments, wherein p20 is 1.

922. The agent of any one of the preceding Embodiments, wherein X^{20} comprises a hydrophobic side chain.

923. The agent of any one of the preceding Embodiments, wherein X^{20} is selected from Aib, Ala, and Leu.

924. The agent of any one of the preceding Embodiments, wherein p20 is 0.

925. The agent of any one of the preceding Embodiments, wherein p21 is 1.

926. The agent of any one of the preceding Embodiments, wherein X^{21} comprises a hydrophobic side chain.

927. The agent of any one of the preceding Embodiments, wherein X^{21} is selected from Aib, Ala, and Leu.

928. The agent of any one of the preceding Embodiments, wherein p21 is 0.

929. The agent of any one of the preceding Embodiments, wherein p22 is 1.

930. The agent of any one of the preceding Embodiments, wherein X^{22} comprises a hydrophobic side chain.

931. The agent of any one of the preceding Embodiments, wherein X^{22} is selected from Aib, Ala, and Leu.

932. The agent of any one of the preceding Embodiments, wherein p22 is 0.

933. The agent of any one of the preceding Embodiments, wherein p23 is 1.

934. The agent of any one of the preceding Embodiments, wherein X^{23} comprises a hydrophobic side chain.

935. The agent of any one of the preceding Embodiments, wherein X^{23} is selected from Aib, Ala, and Leu.

936. The agent of any one of the preceding Embodiments, wherein p23 is 0.

937. The agent of any one of the preceding Embodiments, wherein each amino acid residue is independently $-N(R^{a1})-L^{a1}-C(R^{a2})(R^{a3})-L^{a2}-C(O)$

938. The agent of Embodiment 937, wherein R^{a1} is $-H$.

939. The agent of any one of Embodiments 1-937, wherein R^{a1} are taken together with R^{a2} or R^{a3} and their intervening atom(s) to form an optionally substituted 3-10 (e.g., 3, 4, 5, 6, 7, 8, 9, or 10) membered ring having in addition to the intervening atom(s) 0-5 heteroatoms.

940. The agent of any one of Embodiments 1-937, wherein R^{a1} are taken together with R^{a2} or R^{a3} and their intervening atom(s) to form an optionally substituted 5-7 membered ring having in addition to the intervening atom(s) no heteroatoms.

941. The agent of any one of the preceding Embodiments, wherein L^{a1} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with $-O-$, $-S-$, $-N(R')-$, $-C(O)-$, $-Cy-$, $-C(O)N(R')-$, or $-N(R')C(O)O-$.

942. The agent of any one of Embodiments 1-940, wherein L^{a1} is a covalent bond.

943. The agent of any one of the preceding Embodiments, wherein R^{a2} is $-L^{a}-R'$ wherein, L^{a} is a covalent bond or an optionally substituted bivalent C_{1-6} aliphatic wherein one or more methylene units are

optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −Cy−, −C(O)N(R')−, or −N(R')C(O)O−.

944. The agent of any one of the preceding Embodiments, wherein R^{a3} is $-L^{a}-R'$ wherein, L^{a} is a covalent bond or an optionally substituted bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −Cy−, −C(O)N(R')−, or −N(R')C(O)O−.

945. The agent of any one of Embodiments 1-943, wherein R^{a3} is −H.

946. The agent of any one of Embodiments 1-943, wherein R^{a3} is optionally substituted C_{1-6} aliphatic.

947. The agent of any one of the preceding Embodiments, wherein L^{a2} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are optionally and independently replaced with −O−, −S−, −N(R')−, −C(O)−, −Cy−, −C(O)N(R')−, or −N(R')C(O)O−.

948. The agent of any one of Embodiments 1-946, wherein L^{a2} is a covalent bond.

949. The agent of any one of the preceding Embodiments, wherein the peptide comprises a hydrocarbon staple.

950. The agent of any one of the preceding Embodiments, wherein the peptide comprises a non-hydrogen staple.

951. The agent of any one of the preceding Embodiments, wherein the peptide comprises a staple whose chain comprises −N(R')− or −O−C(O)−N(R')−.

952. The agent of any one of the preceding Embodiments, wherein the peptide has the structure of:

$$R^{N}-[X]_{p}-X^{1}X^{2}X^{3}X^{4}X^{5}X^{6}X^{7}X^{8}X^{9}X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}-[X]_{p'}-R^{C},$$

or a salt thereof, wherein:

each X is independently an amino acid residue;

each p and p' is independently 0-10;

R^{N} is independently a peptide, an amino protecting group or $R'-L^{RN}-$;

R^{C} is independently a peptide, a carboxyl protecting group, $-L^{RC}-R'$, $-O-L^{RC}-R'$ or $-N(R')-L^{RC}-R'$;

each of L^{RN} and L^{RC} is independently L;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −L−R, −C(O)R, −CO_2R, or −SO_2R;

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

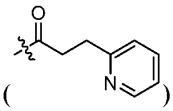
953. The agent of any one of the preceding Embodiments, wherein p is 0.

954. The agent of any one of the preceding Embodiments, wherein p' is 0.

955. The agent of any one of the preceding Embodiments, wherein R^N is −C(O)R.

956. The agent of any one of the preceding Embodiments, wherein R^N is Ac.

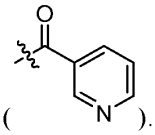
957. The agent of Embodiment 952, wherein R^N is AzAc (N_3−CH_2−C(O)−).

958. The agent of Embodiment 952, wherein R^N is 2PyPrpc ().

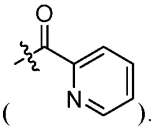
959. The agent of Embodiment 952, wherein R^N is MeOPr ($CH_3OCH_2CH_2C(O)$−).

960. The agent of Embodiment 952, wherein R^N is $MeSO_2$ (−SO_2CH_3).

961. The agent of Embodiment 952, wherein R^N is mPEG2 ($CH_3OCH_2CH_2OCH_2CH_2C(O)$−).

962. The agent of Embodiment 952, wherein R^N is Nic ().

963. The agent of Embodiment 952, wherein R^N is Oct ($CH_3(CH_2)_6C(O)$−).

964. The agent of Embodiment 952, wherein R^N is Pic ().

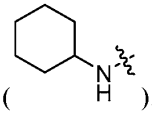
965. The agent of any one of the preceding Embodiments, wherein R^C is −$N(R')_2$.

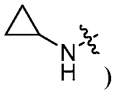
966. The agent of any one of the preceding Embodiments, wherein R^C is −$N(R)_2$.

967. The agent of Embodiment 966, wherein R^C is −NH_2.

968. The agent of Embodiment 966, wherein R^C is −NHEt.

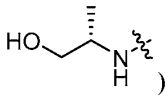
969. The agent of Embodiment 966, wherein R^C is −NHBn.

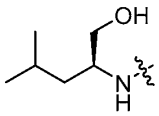
970. The agent of Embodiment 966, wherein R^C is −NHCyHe ().

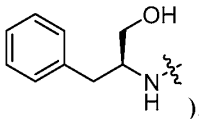
971. The agent of Embodiment 966, wherein R^C is −NHCyPr ().

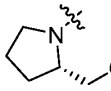
972. The agent of Embodiment 966, wherein R^C is −6AmHex, wherein one amino group of −6AmHex is bonded to the last −C(O)− of the peptide backbone (R^C is $-NH-(CH_2)_6-NH_2$).

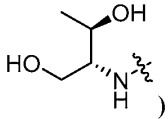
973. The agent of Embodiment 966, wherein R^C is −6AZHex, wherein the amino group of −6AzHex is bonded to the last −C(O)− of the peptide backbone (R^C is $-NH-(CH_2)_6-N_3$).

974. The agent of Embodiment 966, wherein R^C is −Alaol, wherein the amino group of −Alaol is bonded to the last −C(O)− of the peptide backbone (R^C is ).

975. The agent of Embodiment 966, wherein R^C is −Leuol, wherein the amino group of −Leuol is bonded to the last −C(O)− of the peptide backbone (R^C is ).

976. The agent of Embodiment 966, wherein R^C is − Pheol, wherein the amino group of −Pheol is bonded to the last −C(O)− of the peptide backbone (R^C is ).

977. The agent of Embodiment 966, wherein R^C is − Prool, wherein the amino group of −Prool is bonded to the last −C(O)− of the peptide backbone (R^C is ).

978. The agent of Embodiment 966, wherein R^C is − Throl, wherein the amino group of −Throl is bonded to the last −C(O)− of the peptide backbone (R^C is ).

979. The agent of any one of Embodiments 1-964, wherein R^C is −OH.

980. The agent of any one of the preceding Embodiments, wherein the peptide forms a structure that comprises a helix.

981. The agent of any one of the preceding Embodiments, wherein the peptide binds to beta-catenin.

982. The agent of any one of the preceding Embodiments, wherein the peptide binds to beta-catenin with a EC50 of no more than about 2000 nM, or no more than about 1500 nM, or no more than about 1000 nM, or no more than about 500 nM, or no more than about 300 nM, or no more than about 200 nM, or no more than about 100 nM, or no more than about 75 nM, or no more than about 50 nM, or no more than about 25 nM, or no more than about 10 nM as measured by fluorescence polarization.

983. The agent of any one of the preceding Embodiments, wherein the peptide can compete with TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, or APC, or a fragment thereof, for beta-catenin binding.

984. The agent of any one of the preceding Embodiments, wherein the peptide binds to a polypeptide whose sequence is or comprising SEQ ID NO: 2, or a fragment thereof: SVLFYAITTLHNLLLHQEGAKMAVRLAGGLQKMVALLNKTNVKFLAITTDCLQILAYGNQESKL IILASGGPQALVNIMRTYTYEKLLWTTSRVLKVLSVCSSNKPAIVEAGGMQALGLHLTDPSQRLV QNCLWTLRNLSDAATKQEGMEGLLGTLVQLLGSDDINVVTCAAGILSNLTCNNYKNKMMVCQ VGGIEALVRT (SEQ ID NO: 2).

985. The agent of any one of the preceding Embodiments, wherein the peptide binds to beta-catenin and interacts with one or more residues that are or correspond to at least two, or at least three, or at least four, or at least five, or at least six, or at least seven, or at least eight or at least nine, or at least ten, or at least eleven, or at least twelve, or at least thirteen, or at least fourteen, or at least fifteen, or at least sixteen, or at least seventeen, or at least eighteen, or at least nineteen, or at least twenty of the following amino acid residues in SEQ ID NO: 1 at the indicated positions: A305, Y306, G307, N308, Q309, K312, R342, K345, V346, V349, Q375, R376, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419.

986. The agent of any one of the preceding Embodiments, wherein the peptide binds to beta-catenin and interacts with one or more residues that are or correspond to at least two, or at least three, or at least four, or at least five, or at least six, or at least seven, or at least eight or at least nine, or at least ten, or at least eleven, or at least twelve, or at least thirteen, or at least fourteen, or at least fifteen, or at least sixteen, or at least seventeen, or at least eighteen, or at least nineteen, or at least twenty of the following amino acid residues in SEQ ID NO: 1 at the indicated positions: A305, Y306, G307, N308, Q309, K312, R342, K345, V346, V349, Q375, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419.

987. The agent of any one of the preceding Embodiments, wherein the peptide binds to beta-catenin and interacts with one or more residues that are or correspond to at least two, or at least three, or at least four, or at least five, or at least six, or at least seven, or at least eight or at least nine, or at least ten, or at least eleven, or at least twelve, or at least thirteen, or at least fourteen, or at least fifteen, or at least sixteen, or at least seventeen, or at least eighteen, or at least nineteen, or at least twenty of the following

amino acid residues in SEQ ID NO: 1 at the indicated positions: A305, Y306, G307, N308, Q309, K312, K345, V346, V349, Q379, N380, L382, W383, R386, N387, D413, N415, V416, T418, and C419.

988. The agent of any one of the preceding Embodiments, wherein the peptide binds to beta-catenin and interacts with one or more residues that are or correspond to at least two, or at least three, or at least four, or at least five, or at least six, or at least seven, or at least eight or at least nine, or at least ten, or at least eleven, or at least twelve, or at least thirteen, or at least fourteen, or at least fifteen, or at least sixteen, or at least seventeen, or at least eighteen, or at least nineteen, or at least twenty of the following amino acid residues in SEQ ID NO: 1 at the indicated positions: G307, K312, K345, W383, N387, D413, and N415.

989. The agent of any one of the preceding Embodiments, wherein the agent interacts with G307 of beta-catenin or an amino acid residue corresponding thereto.

990. The agent of any one of the preceding Embodiments, wherein the agent interacts with K312 of beta-catenin or an amino acid residue corresponding thereto.

991. The agent of any one of the preceding Embodiments, wherein the agent interacts with K345 of beta-catenin or an amino acid residue corresponding thereto.

992. The agent of any one of the preceding Embodiments, wherein the agent interacts with W383 of beta-catenin or an amino acid residue corresponding thereto.

993. The agent of any one of the preceding Embodiments, wherein the agent interacts with N387 of beta-catenin or an amino acid residue corresponding thereto.

994. The agent of any one of the preceding Embodiments, wherein the agent interacts with D413 of beta-catenin or an amino acid residue corresponding thereto.

995. The agent of any one of the preceding Embodiments, wherein the agent interacts with N415 of beta-catenin or an amino acid residue corresponding thereto.

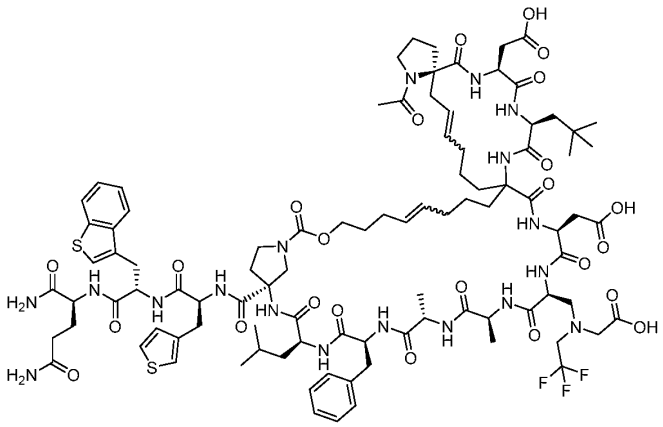
996. The agent of any one of the preceding Embodiments, wherein the agent binds to beta-catenin at a site that is not an axin binding site.

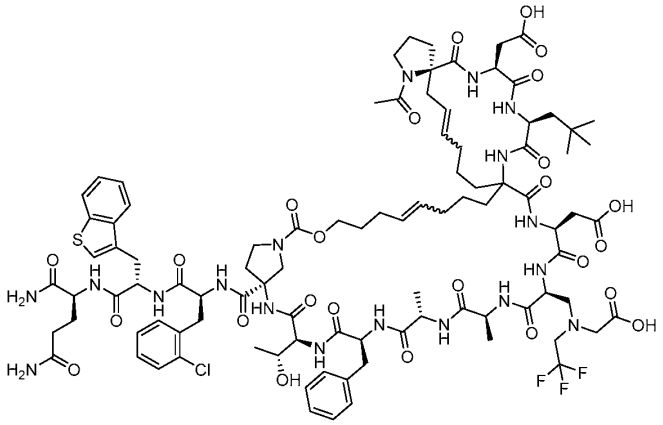
997. The agent of any one of the preceding Embodiments, wherein the agent binds to beta-catenin at a site that is not a Bcl9 binding site.

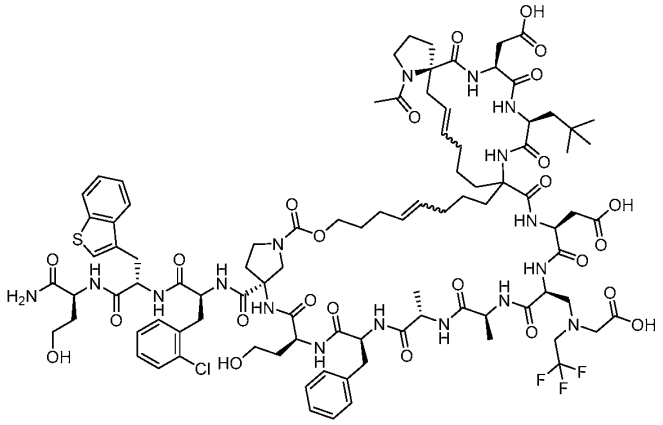
998. The agent of any one of the preceding Embodiments, wherein the agent binds to beta-catenin at a site that is not a TCF binding site.

999. The agent of any one of the preceding Embodiments, wherein the agent is the peptide.

1000. An agent having a structure selected from Table E3 or a salt thereof.

1001. An agent has the structure of  or a salt thereof.

1002. An agent has the structure of  or a salt thereof.

1003. An agent has the structure of  or a salt thereof.

1004. The agent of any one of Embodiments 1001-1003, wherein a double bond of a staple bonded to the first amino acid from the N-terminus is *E*.

1005. The agent of any one of Embodiments 1001-1003, wherein a double bond of a staple bonded to the first amino acid from the N-terminus is *Z*.

1006. The agent of any one of Embodiments 1001-1005, wherein a double bond of a staple bonded to the 11th amino acid from the N-terminus is *E*.

1007. The agent of any one of Embodiments 1001-1005, wherein a double bond of a staple bonded to the 11th amino acid from the N-terminus is *Z*.

1008. A compound having the structure of formula PA:

$$N(R^{PA})(R^{a1})–L^{a1}–C(R^{a2})(R^{a3})–L^{a2}–C(O)R^{PC},$$

PA

or a salt thereof, wherein:

R^{PA} is −H or an amino protecting group;

each of R^{a1} and R^{a3} is independently $-L^{a}–R'$;

R^{a2} is $-L^{aa}–C(O)R^{PS}$;

each of L^{a}, L^{a1} and L^{a2} is independently L;

$-C(O)R^{PS}$ is optionally protected or activated −COOH;

$-C(O)R^{PC}$ is optionally protected or activated −COOH;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2–$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2–$, $-S(O)_2N(R')–$, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −R, −C(O)R, $-CO_2R$, or $-SO_2R$; and

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

1009. The compound of Embodiment 1008, wherein R^{a2} is $-L^{aa}-C(O)R^{PS}$, wherein L^{aa} is L and L^{aa} comprises $-N(R')-$ or $-Cy-$.

1010. The compound of any one of the preceding Embodiments, wherein L^{a1} is a covalent bond.

1011. The compound of any one of the preceding Embodiments, wherein L^{a2} is a covalent bond.

1012. The compound of any one of the preceding Embodiments, wherein L^{aa} is an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$, wherein at least one methylene unit is replaced with $-Cy-$.

1013. The compound of any one of the preceding Embodiments, wherein L^{aa} is $-L^{am1}-Cy-L^{am2}-$, wherein each of L^{am1} and L^{am2} is independently L^{am}, wherein each L^{am} is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

1014. The compound of any one of the preceding Embodiments, wherein $-L^{am2}-$ is bonded to $-C(O)R^{PS}$.

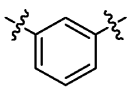
1015. The compound of any one of the preceding Embodiments, wherein L^{am2} is a covalent bond.

1016. The compound of any one of the preceding Embodiments, wherein $-Cy-$ is an optionally substituted 4-7 membered ring having 0-3 heteroatoms.

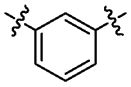
1017. The compound of any one of the preceding Embodiments, wherein $-Cy-$ is an optionally substituted 6-10 membered aryl ring or is an optionally substituted 5-10 membered heteroaryl ring having 1-5 heteroatoms.

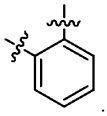
1018. The compound of any one of the preceding Embodiments, wherein $-Cy-$ is an optionally substituted phenyl ring.

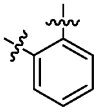
1019. The compound of any one of the preceding Embodiments, wherein $-Cy-$ is optionally substituted

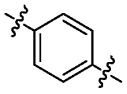


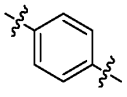
.

1020. The compound of any one of the preceding Embodiments, wherein −Cy− is  .

1021. The compound of any one of Embodiments 1008-1015, wherein −Cy− is optionally substituted  .

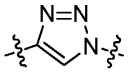
1022. The compound of any one of Embodiments 1008-1015, wherein −Cy− is  .

1023. The compound of any one of Embodiments 1008-1015, wherein −Cy− is optionally substituted  .

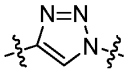
1024. The compound of any one of Embodiments 1008-1015, wherein −Cy− is  .

1025. The compound of any one of Embodiments 1008-1017, wherein −Cy− is an optionally substituted 5-10 membered heteroaryl ring having 1-5 heteroatoms.

1026. The compound of any one of Embodiments 1008-1017, wherein −Cy− is an optionally substituted 5-membered heteroaryl ring having 1-5 heteroatoms.

1027. The compound of any one of Embodiments 1008-1017, wherein −Cy− is optionally substituted 

.

1028. The compound of any one of Embodiments 1008-1017, wherein −Cy− is 

.

1029. The compound of any one of the preceding Embodiments, wherein L^{aa} comprises −N(R')−.

1030. The compound of Embodiment 1029, wherein L^{aa} is $-L^{am1}-(NR')-L^{am2}-$, wherein each of L^{am1} and L^{am2} is independently L^{am}, wherein each L^{am} is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{10} aliphatic group wherein one or more methylene units of the aliphatic group are optionally and independently replaced with $-C(R')_2-$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $-S(O)_2-$, $-S(O)_2N(R')-$, −C(O)S−, or −C(O)O−.

1031. The compound of any one of Embodiments 1029-1030, wherein R' of the −N(R')− is taken together with R^{a3} and their intervening atoms to form an optionally substituted 3-10 membered ring having 0-5 heteroatoms in addition to the intervening atoms.

1032. The compound of any one of Embodiments 1029-1031, wherein −N(R')− is bonded to two carbon atoms which two carbon atoms do not form any double bonds with heteroatoms.

1033. The compound of any one of Embodiments 1029-1032, wherein $-L^{am2}-$ is bonded to $-C(O)R^{PS}$.

1034. The compound of any one of Embodiments 1029-1033, wherein L^{am1} is optionally substituted C_{1-4} alkylene.

1035. The compound of any one of Embodiments 1029-1033, wherein L^{am1} is optionally substituted $-(CH_2)m-$, wherein m is 1, 2, 3, or 4.

1036. The compound of any one of Embodiments 1029-1033, wherein L^{am1} is optionally substituted $-CH_2-$.

1037. The compound of any one of Embodiments 1029-1033, wherein L^{am1} is $-CH_2-$.

1038. The compound of any one of Embodiments 1029-1037, wherein L^{am2} is optionally substituted linear C_{1-2} alkylene.

1039. The compound of any one of Embodiments 1029-1037, wherein L^{am2} is $-[C(R')_2]n$, wherein n is 1 or 2.

1040. The compound of any one of Embodiments 1029-1037, wherein L^{am2} is −[CHR']n, wherein n is 1 or 2.

1041. The compound of any one of Embodiments 1039-1040, wherein each R' is independently −H or optionally substituted C_{1-6} alkyl.

1042. The compound of any one of Embodiments 1029-1037, wherein L^{am2} is optionally substituted $-CH_2-$.

1043. The compound of any one of Embodiments 1029-1042, wherein L^{am2} is $-CH_2-$.

1044. The compound of any one of Embodiments 1029-1043, wherein L^{aa} comprises −N(R')−, wherein R' of the −N(R')− is $-R^{NR}$, wherein R^{NR} is R.

1045. The compound of any one of Embodiments 1029-1043, wherein L^{aa} comprises −N(R')−, wherein R' of the −N(R')− is $-CH_2-R^{NR}$, wherein R^{NR} is R.

1046. The compound of any one of Embodiments 1029-1043, wherein L^{aa} comprises −N(R')−, wherein R' of the −N(R')− is $-C(O)R^{NR}$, wherein R^{NR} is R.

1047. The compound of any one of Embodiments 1029-1043, wherein L^{aa} comprises −N(R')−, wherein R' of the −N(R')− is $-SO_2R^{NR}$, wherein R^{NR} is R.

1048. The compound of any one of Embodiments 1044-1047, wherein R^{NR} is optionally substituted C_{1-6} aliphatic or heteroaliphatic having 1-4 heteroatoms.

1049. The compound of any one of Embodiments 1044-1048, wherein R^{NR} is C_{1-7} alkyl or heteroalkyl having 1-4 heteroatoms, wherein the alkyl or heteroalkyl is optionally substituted with one or more groups independently selected from halogen, a C_{5-6} aromatic ring having 0-4 heteroatoms, and an optionally substituted 3-10 membered cycloalkyl or heteroalkyl ring having 1-4 heteroatoms.

1050. The compound of any one of Embodiments 1044-1049, wherein R^{NR} is $-CF_3$.

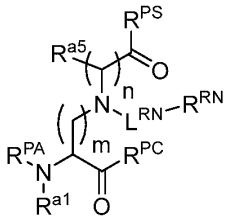
1051. The compound of any one of Embodiments 1044-1048, wherein L^{am2} is or comprises $-C(R')_2-$ wherein the R' group and R' in $-N(R')-$ of L^{aa} are taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

1052. The compound of any one of Embodiments 1008-1012, wherein L^{aa} is optionally substituted C_{1-4} alkylene.

1053. The compound of Embodiment 1052, wherein L^{aa} is optionally substituted $-CH_2-CH_2-$.

1054. The compound of Embodiment 1052, wherein L^{aa} is optionally substituted $-CH_2-$.

1055. The compound of Embodiment 1008, having the structure of:



or a salt thereof, wherein:

each of m and n is independently 1, 2, 3, or 4;

L^{RN} is L;

R^{RN} is R; and

R^{a5} is R'.

1056. The compound of Embodiment 1055, wherein m is 1.

1057. The compound of any one of Embodiments 1055-1056, wherein L^{RN} is $-CH_2-$, $-CO-$, or $-SO_2-$.

1058. The compound of any one of Embodiments 1055-1056, wherein L^{RN} is $-CH_2-$.

1059. The compound of any one of Embodiments 1055-1058, wherein R^{NR} is C_{1-7} alkyl or heteroalkyl having 1-4 heteroatoms, wherein the alkyl or heteroalkyl is optionally substituted with one or more groups independently selected from halogen, a C_{5-6} aromatic ring having 0-4 heteroatoms, and an optionally substituted 3-10 membered cycloalkyl or heteroalkyl ring having 1-4 heteroatoms.

1060. The compound of any one of Embodiments 1055-1059, wherein one or more R^{a5} are independently −H.

1061. The compound of any one of Embodiments 1055-1060, wherein one or more R^{a5} are independently optionally substituted C_{1-6} alkyl.

1062. The compound of any one of Embodiments 1055-1060, wherein $-L^{RN}-R^{RN}$ is R, and is taken together with a R^{a5} and their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

1063. The compound of Embodiment 1058, wherein R^{RN} is methyl.

1064. The compound of Embodiment 1058, wherein R^{RN} is $-CF_3$.

1065. The compound of any one of the preceding Embodiments, wherein R^{a1} is −H.

1066. The compound of any one of Embodiments 1008-1051, wherein R^{a1} is optionally substituted C_{1-6} alkyl.

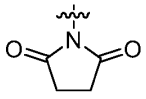
1067. The compound of any one of the preceding Embodiments, wherein $-C(O)R^{PC}$ is a protected carboxylic acid group.

1068. The compound of any one of Embodiments 1008-1066, wherein $-C(O)R^{PC}$ is an activated carboxylic acid group.

1069. The compound of any one of Embodiments 1008-1066, wherein $-C(O)R^{PC}$ is −C(O)OR'.

1070. The compound of Embodiment 1069, wherein R' is −H.

1071. The compound of Embodiment 1069, wherein R' is pentafluorophenyl.

1072. The compound of Embodiment 1069, wherein R' is  .

1073. The compound of any one of the preceding Embodiments, wherein $-C(O)R^{PS}$ is −C(O)OR'.

1074. The compound of Embodiment 1073, wherein R' is −H.

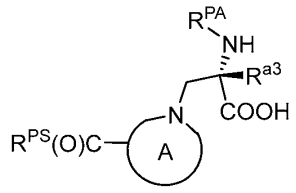
1075. The compound of Embodiment 1073, wherein R' is optionally substituted C_{1-6} aliphatic.

1076. The compound of Embodiment 1073, wherein R' is t-butyl.

1077. The compound of Embodiment 1073, wherein R' is benzyl.

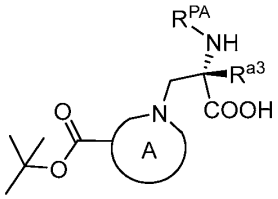
1078. The compound of Embodiment 1073, wherein R' is allyl.

1079. The compound of Embodiment 1008, wherein the compound has the structure of



or a salt thereof, wherein Ring A is an optionally substituted 3-7 membered saturated, partially unsaturated or aromatic ring.

1080. The compound of Embodiment 1008, wherein the compound has the structure of

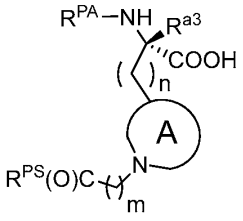


or a salt thereof, wherein Ring A is an optionally substituted 3-7 membered saturated, partially unsaturated or aromatic ring.

1081. The compound of any one of Embodiment 1079 or 1080, wherein −C(O)OtBu is bonded to a chiral carbon atom having a *R* configuration.

1082. The compound of any one of Embodiment 1079 or 1080, wherein −C(O)OtBu is bonded to a chiral carbon atom having a *S* configuration.

1083. The compound of Embodiment 1008, wherein the compound has the structure of



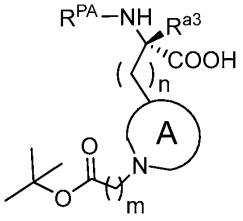
or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

m is 0, 1, 2, or 3.

1084. The compound of Embodiment 1008, wherein the compound has the structure of



or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

m is 0, 1, 2, or 3.

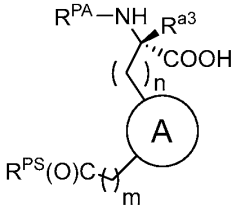
1085. The compound of any one of Embodiments 1083-1084, wherein Ring A is an optionally substituted 4-10 membered ring.

1086. The compound of any one of Embodiments 1083-1085, wherein n is 1.

1087. The compound of any one of Embodiments 1083-1086, wherein Ring A is bonded to $-(CH_2)n-$ at a chiral carbon which is *R*.

1088. The compound of any one of Embodiments 1083-1086, wherein Ring A is bonded to $-(CH_2)n-$ at a chiral carbon which is *S*.

1089. The compound of Embodiment 1008, wherein the compound has the structure of



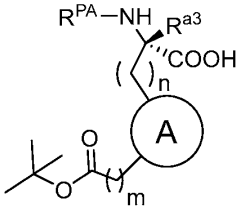
or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

m is 0, 1, 2, or 3.

1090. The compound of Embodiment 1008, wherein the compound has the structure of



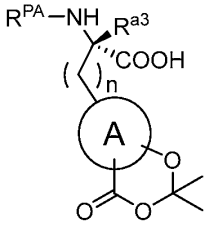
or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

m is 0, 1, 2, or 3.

1091. The compound of Embodiment 1008, wherein the compound has the structure of



or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring; and

n is 0, 1, or 2.

1092. The compound of any one of Embodiments 1083-1091, wherein n is 1.

1093. The compound of any one of Embodiments 1083-1092, wherein m is 0.

1094. The compound of any one of Embodiments 1083-1092, wherein m is 1, 2, or 3.

1095. The compound of any one of Embodiments 1083-1092, wherein m is 1.

1096. The compound of any one of Embodiments 1083-1095, wherein Ring A is or comprises an optionally substituted saturated monocyclic ring.

1097. The compound of any one of Embodiments 1083-1096, wherein Ring A is or comprises an optionally substituted partially unsaturated monocyclic ring.

1098. The compound of any one of Embodiments 1083-1097, wherein Ring A is or comprises an optionally substituted aromatic monocyclic ring.

1099. The compound of any one of Embodiments 1089-1095, wherein Ring A is optionally substituted phenyl.

1100. The compound of any one of Embodiments 1083-1095, wherein Ring A is optionally substituted 5-6 membered heteroaryl having 1-3 heteroatoms.

1101. The compound of any one of Embodiments 1083-1095, wherein Ring A is optionally substituted 5-6 membered heteroaryl having 1-3 heteroatoms, wherein at least one heteroatom is nitrogen.

1102. The compound of Embodiment 1101, wherein Ring A is an optionally substituted triazole ring.

1103. The compound of any one of Embodiments 1083-1095, wherein Ring A is an optionally substituted 8-10 membered bicyclic ring having 1-6 heteroatoms.

1104. The compound of any one of Embodiments 1083-1086, wherein Ring A is an optionally substituted 8-10 membered bicyclic aromatic ring having 1-6 heteroatoms, wherein each monocyclic unit is independently an optionally 5-6 membered aromatic ring having 0-3 heteroatoms.

1105. The compound of any one of Embodiments 1100-1104, wherein Ring A is bonded to $-(CH_2)n-$ at a carbon atom.

1106. The compound of any one of Embodiments 1100-1104, wherein Ring A is bonded to $-(CH_2)n-$ at a nitrogen atom.

1107. The compound of any one of the preceding Embodiments, wherein Ring A or −Cy− in L^{aa} is optionally substituted, and each substitute is independently selected from halogen, −R, $-CF_3$, $-N(R)_2$, −CN, and −OR, wherein each R is independently C_{1-6} aliphatic optionally substituted with one or more −F.

1108. The compound of any one of the preceding Embodiments, wherein Ring A or −Cy− in L^{aa} is optionally substituted, and each substitute is independently selected from halogen, C_{1-5} linear, branched or

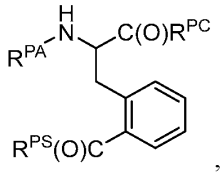
cyclic alkyl, −OR wherein R is C_{1-4} linear, branched or cyclic alkyl, fluorinated alkyl, $-N(R)_2$ wherein each R is independently C_{1-6} linear, branched or cyclic alkyl, or −CN.

1109. The compound of any one of the preceding Embodiments, wherein R^{a3} is −H or optionally substituted C_{1-6} aliphatic.

1110. The compound of any one of the preceding Embodiments, wherein R^{a3} is −H.

1111. The compound of any one of Embodiments 1008-1109, wherein R^{a3} is methyl.

1112. A compound having the structure of:



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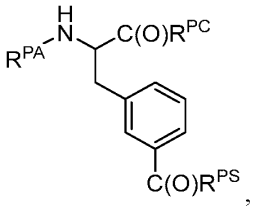
or a salt thereof, wherein:

R^{PA} is −H or an amino protecting group;

$-C(O)R^{PS}$ is optionally protected or activated −COOH; and

$-C(O)R^{PC}$ is optionally protected or activated −COOH.

1113. A compound having the structure of:



,

or a salt thereof, wherein:

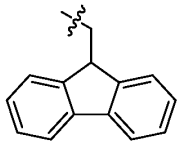
R^{PA} is −H or an amino protecting group;

$-C(O)R^{PS}$ is optionally protected or activated −COOH; and

$-C(O)R^{PC}$ is optionally protected or activated −COOH.

1114. The compound of any one of the preceding Embodiments, wherein R^{PA} is an amino protecting group suitable for peptide synthesis.

1115. The compound of any one of the preceding Embodiments, wherein R^{PA} is $-C(O)-O-R$.

1116. The compound of Embodiment 1115, wherein R is optionally substituted  .

1117. The compound of any one of the preceding Embodiments, wherein R^{PA} is −Fmoc.

1118. The compound of any one of the preceding Embodiments, wherein R^{PA} is −Cbz.

1119. The compound of any one of the preceding Embodiments, wherein R^{PA} is −Boc.

1120. The compound of any one of the preceding Embodiments, wherein R^{PS} is a protecting group orthogonal to R^{PA}.

1121. The compound of any one of the preceding Embodiments, wherein R^{PS} is a protecting group orthogonal to R^{PC}.

1122. The compound of any one of the preceding Embodiments, wherein R^{PS} is compatible with peptide synthesis.

1123. The compound of any one of the preceding Embodiments, wherein $-C(O)R^{PS}$ is −C(O)OR'.

1124. The compound of Embodiment 1073, wherein R' is −H.

1125. The compound of Embodiment 1073, wherein R' is optionally substituted C_{1-6} aliphatic.

1126. The compound of Embodiment 1073, wherein R' is t-butyl.

1127. The compound of Embodiment 1073, wherein R' is benzyl.

1128. The compound of Embodiment 1073, wherein R' is allyl.

1129. The compound of any one of Embodiments 1008-1122, wherein $-C(O)R^{PS}$ is −C(O)S−L−R'.

1130. The compound of Embodiment 1129, wherein L is optionally substituted $-CH_2-$.

1131. The compound of Embodiment 1129, wherein L is $-CH_2-$.

1132. The compound of any one of Embodiments 1129-1131, wherein R' is optionally substituted phenyl.

1133. The compound of any one of Embodiments 1129-1131, wherein R' is 2, 4, 6-trimethoxyphenyl.

1134. The compound of Embodiment 1129, wherein R^{PS} is −SH.

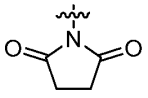
1135. The compound of any one of the preceding Embodiments, wherein $-C(O)R^{PC}$ is a protected carboxylic acid group.

1136. The compound of any one of Embodiments 1008-1133, wherein $-C(O)R^{PC}$ is an activated carboxylic acid group.

1137. The compound of any one of Embodiments 1008-1133, wherein $-C(O)R^{PC}$ is −C(O)OR'.

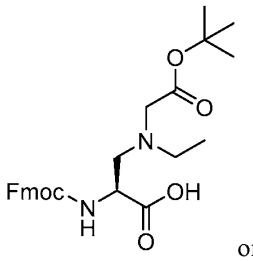
1138. The compound of Embodiment 1137, wherein R' is −H.

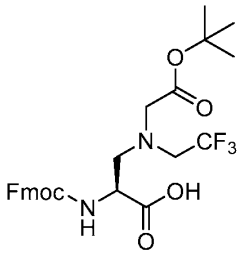
1139. The compound of Embodiment 1137, wherein R' is pentafluorophenyl.

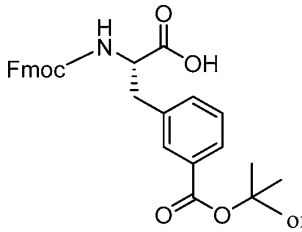
1140. The compound of Embodiment 1137, wherein R' is  .

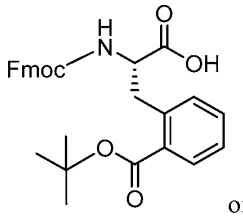
1141. The compound of any one of the preceding Embodiments, wherein each heteroatom is independently selected from oxygen, nitrogen, sulfur, phosphorus and silicon.

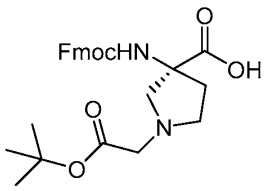
1142. The compound of any one of the preceding Embodiments, wherein each heteroatom is independently selected from oxygen, nitrogen, and sulfur.

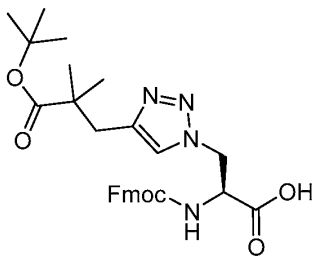
1143. A compound, wherein the compound is  or a salt thereof.

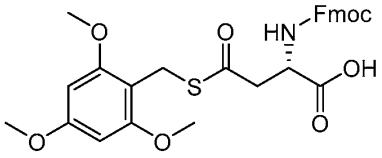
1144. A compound, wherein the compound is  or a salt thereof.

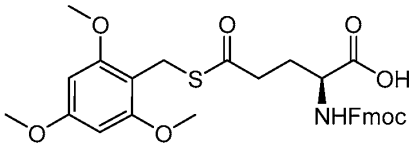
1145. A compound, wherein the compound is  or a salt thereof.

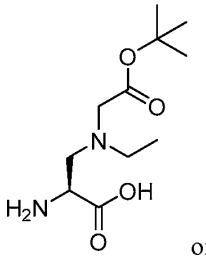
1146. A compound, wherein the compound is  or a salt thereof.

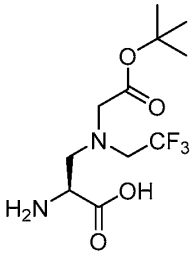
1147. A compound, wherein the compound is  or a salt thereof.

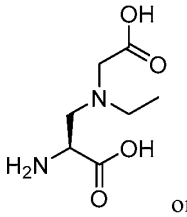
1148. A compound, wherein the compound is  or a salt thereof.

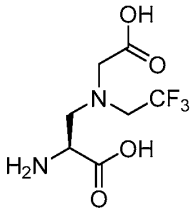
1149. A compound, wherein the compound is  or a salt thereof.

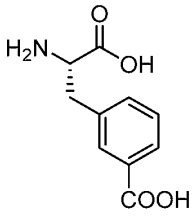
1150. A compound, wherein the compound is  or a salt thereof.

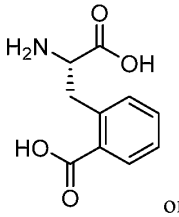
1151. A compound, wherein the compound is  or a salt thereof.

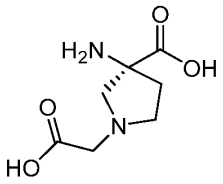
1152. A compound, wherein the compound is  or a salt thereof.

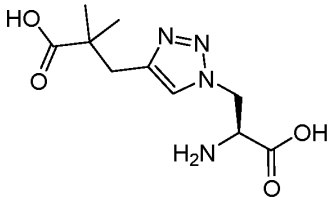
1153. A compound, wherein the compound is  or a salt thereof.

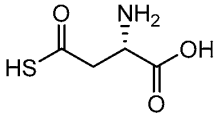
1154. A compound, wherein the compound is  or a salt thereof.

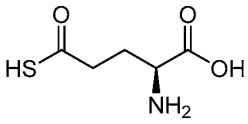
1155. A compound, wherein the compound is  or a salt thereof.

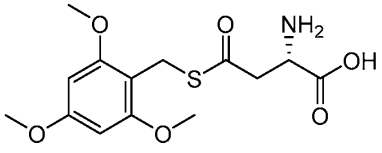
1156. A compound, wherein the compound is  or a salt thereof.

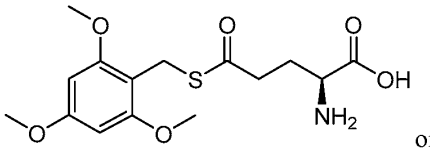
1157. A compound, wherein the compound is  or a salt thereof.

1158. A compound, wherein the compound is  or a salt thereof.

1159. A compound, wherein the compound is  or a salt thereof.

1160. A compound, wherein the compound is  or a salt thereof.

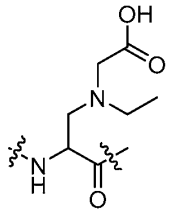
1161. A compound, wherein the compound is  or a salt thereof.

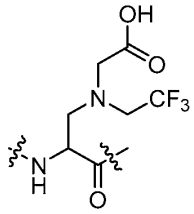
1162. A compound, wherein the compound is  or a salt thereof.

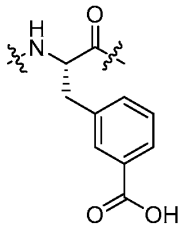
1163. The compound of any one of the preceding Embodiments, wherein the compound has a purity of at least about 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, or 99%.

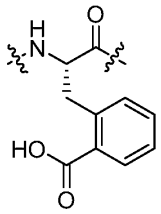
1164. A compound, comprising a residue of any one of the preceding Embodiments.

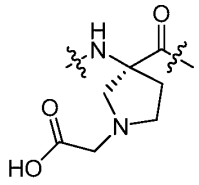
1165. A compound, comprising a residue of Table A-IV.

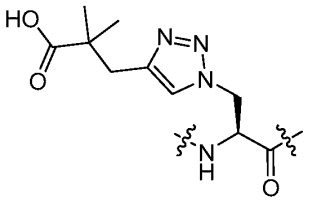
1166. A compound, comprising a residue having the structure of  or a salt form thereof.

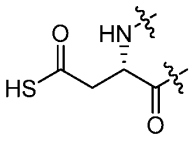
1167. A compound, comprising a residue having the structure of  or a salt form thereof.

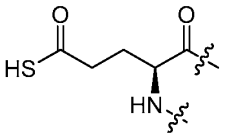
1168. A compound, comprising a residue having the structure of  or a salt form thereof.

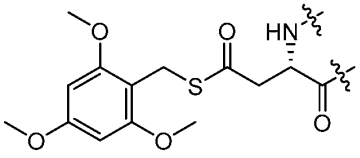
1169. A compound, comprising a residue having the structure of  or a salt form thereof.

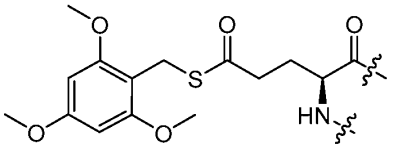
1170. A compound, comprising a residue having the structure of  or a salt form thereof.

1171. A compound, comprising a residue having the structure of  or a salt form thereof.

1172. A compound, comprising a residue having the structure of  or a salt form thereof.

1173. A compound, comprising a residue having the structure of  or a salt form thereof.

1174. A compound, comprising a residue having the structure of  or a salt form thereof.

1175. A compound, comprising a residue having the structure of  or a salt form thereof.

1176. The compound of any one of Embodiments 1164-1175, wherein the compound is or comprise a peptide.

1177. The compound of any one of Embodiments 1164-1175, wherein the compound is an agent of any one of the preceding Embodiments.

1178. The compound of any one of Embodiments 1164-1175, wherein the compound is or comprise a stapled peptide.

1179. A method for preparing a compound of any one of Embodiments 1164-1178, comprising utilization of a compound of any one of the Embodiments 1008-1163.

1180. An agent, which agent comprises a residue of an amino acid of any one of the preceding Embodiments.

1181. The agent of any one of Embodiments 1-999, wherein the agent comprises a residue of an amino acid of any one of the preceding Embodiments.

1182. The agent of any one of the preceding Embodiments, wherein each olefin double bond in a staple is independently and optionally converted into a single bond.

1183. The agent of any one of the preceding Embodiments, wherein each olefin double bond in a staple is converted into a single bond.

1184. The agent of any one of the preceding Embodiments, wherein each olefin double bond is converted into a single bond.

1185. The agent of any one of the preceding Embodiments, wherein each olefin double bond is independently and optionally converted into −CHR'−CHR'−, wherein each R is independently −H, −R, −OR, −OH, −$N(R)_2$, or −SR.

1186. The agent of any one of the preceding Embodiments, wherein each olefin double bond is converted into −CHR'−CHR'−, wherein each R is independently −H, −R, −OR, −OH, −$N(R)_2$, or −SR.

1187. The agent of any one of the preceding Embodiments, wherein each olefin double bond is independently and optionally converted into optionally substituted −CH_2−CH_2−.

1188. The agent of any one of the preceding Embodiments, wherein each olefin double bond is converted into −CH_2−CH_2−.

1189. A pharmaceutical composition, comprising or delivering an agent or amino acid of any one of the preceding Embodiments, and a pharmaceutically acceptable carrier.

1190. A composition selected from Table E3.

1191. A pharmaceutical composition, comprising or delivering one or more or all peptide agents in a composition selected from Table E3 and a pharmaceutically acceptable carrier.

1192. A method for preparing an agent of any one of the preceding Embodiments, comprising incorporating a residue of an amino acid of any one of the preceding Embodiments.

1193. A method for modulating beta-catenin interaction with a partner in a system, comprising contacting beta-catenin with an agent or composition of any one of the preceding Embodiments.

1194. A method for modulating beta-catenin interaction with a partner in a system, comprising administering or delivering to the system an agent or composition of any one of the preceding Embodiments.

1195. The method of nay one of Embodiments 1193-1194, wherein the partner is TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, or APC.

1196. A method for modulating a TCF-beta-catenin interaction in a system, comprising contacting beta-catenin with an agent or composition of any one of the preceding Embodiments.

1197. A method for inhibiting beta-catenin dependent cell proliferation, comprising administering or delivering to the system an agent or composition of any one of the preceding Embodiments.

1198. A method for modulating a TCF-beta-catenin interaction in a system, comprising administering or delivering to the system an agent or composition of any one of the preceding Embodiments.

1199. The method of any one of Embodiments 1193-1198, wherein a system is an in vitro system.

1200. The method of any one of Embodiments 1193-1198, wherein a system is or comprises a cell, tissue or organ.

1201. The method of any one of Embodiments 1193-1198, wherein a system is a subject.

1202. A method for treating or preventing a condition, disorder or disease associated with beta-catenin in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding Embodiments.

1203. A method for treating cancer in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding Embodiments.

1204. A method for treating or preventing a condition, disorder or disease associated with beta-catenin interaction with a partner in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding Embodiments.

1205. The method of Embodiment 1204, wherein the partner is TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, or APC.

1206. A method for treating or preventing a condition, disorder or disease associated with TCF-beta-catenin interaction in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding Embodiments.

1207. The method of any one of the preceding Embodiments, wherein the condition, disorder or disease is melanoma.

1208. The method of any one of the preceding Embodiments, comprising administering or deliver to a subject a second therapeutic agent.

1209. The method of any one of the preceding Embodiments, comprising administering or deliver to a subject a second therapy.

1210. The method of Embodiment 1208, wherein a second therapeutic agent or therapy is administered prior to an agent of any one of the preceding Embodiments.

1211. The method of Embodiment 1208, wherein a second therapeutic agent or therapy is administered about or no more than about 1, 2, 3, 4, 5, 6, or 7 days, or 1, 2, 3, or weeks, or 1, 2, 3, 4, 5, or 6 months, prior to an agent of any one of the preceding Embodiments.

1212. The method of Embodiment 1208, wherein a second therapeutic agent or therapy is administered concurrently with an agent of any one of the preceding Embodiments.

1213. The method of Embodiment 1208, wherein a second therapeutic agent or therapy is administered subsequently to an agent of any one of the preceding Embodiments.

1214. The method of Embodiment 1208, wherein a second therapeutic agent or therapy is administered about or no more than about 1, 2, 3, 4, 5, 6, or 7 days, or 1, 2, 3, or weeks, or 1, 2, 3, 4, 5, or 6 months, subsequently to an agent of any one of the preceding Embodiments.

1215. The method of any one of the preceding Embodiments, wherein a subject is exposed to a second therapeutic agent or therapy and an agent of any one of the preceding Embodiments.

1216. The method of any one of the preceding Embodiments, wherein a subject is exposed to a therapeutic effect of a second therapeutic agent or therapy and a therapeutic effect of an agent of any one of the preceding Embodiments.

1217. The method of any one of the preceding Embodiments, wherein a second therapeutic agent is or comprises a chemotherapy agent.

1218. The method of any one of the preceding Embodiments, wherein a second therapeutic agent is or comprises a hormone therapy agent.

1219. The method of any one of the preceding Embodiments, wherein a second therapeutic agent is or comprises an immunotherapy agent.

1220. The method of any one of the preceding Embodiments, wherein a second therapeutic agent is or comprises a checkpoint inhibitor.

1221. The method of any one of the preceding Embodiments, wherein a second therapeutic agent is or comprises an antibody.

1222. The method of any one of the preceding Embodiments, wherein a second therapeutic agent is or comprises a CTLA-4, PD-1 or PD-L1 inhibitor.

1223. The method of any one of the preceding Embodiments, wherein a second therapeutic agent is or comprises a cell.

1224. The method of any one of the preceding Embodiments, wherein the second therapeutic agent reduces one or more side effects of an agent or composition of any one of the preceding Embodiments.

1225. The method of any one of the preceding Embodiments, wherein the agent or composition reduces one or more side effects of a second therapeutic agent.

1226. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises surgery.

1227. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises chemotherapy.

1228. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises radiotherapy.

1229. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises hormone therapy.

1230. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises stem cell or bone marrow transplant.

1231. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises immunotherapy.

1232. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises T-cell therapy.

1233. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises CAR T-cell therapy.

1234. The method of any one of the preceding Embodiments, wherein a second therapy is or comprises administering to the subject a population of immune cells.

1235. The method of any one of the preceding Embodiments, wherein the agent or composition reduces one or more side effects of a second therapy.

1236. The method of any one of the preceding Embodiments, wherein unit dose of a second therapy or therapeutic agent is reduced compared to when it is administered alone.

1237. The method of any one of the preceding Embodiments, wherein total dose of a second therapy or therapeutic agent is reduced compared to when it is administered alone.

1238. The method of any one of the preceding Embodiments, wherein unit dose of an agent or composition of any one of the preceding Embodiments is reduced compared to when it is administered alone.

1239. The method of any one of the preceding Embodiments, wherein total dose of an agent or composition of any one of the preceding Embodiments is reduced compared to when it is administered alone.

1240. The method of any one of the preceding Embodiments, wherein the combination therapy provides higher efficacy than when an agent or composition is administered or delivered alone.

1241. The method of any one of the preceding Embodiments, wherein the combination therapy provides higher efficacy than when a second therapeutic agent or therapy is administered or delivered alone.

EXEMPLIFICATION

[0697] Those skilled in the art appreciate that various technologies are available for manufacturing and assessing provided agents including various peptides such as stapled peptides in accordance with the

present disclosure, for example, many technologies for preparing small molecules and peptides can be utilized to prepare provided agents, and various assays are available for assessing properties and/or activities of provided agents. Described below are certain such useful technologies.

[0698] Example 1. Peptide Synthesis.

[0699] Among other things, peptides can be prepared using various peptide synthesis technologies in accordance with the present disclosure. In many embodiments, peptides were prepared using Fmoc-based synthesis, often on suitable solid phase. For various stapled peptides, amino acid residues were stapled through suitable chemistry, e.g., olefin metathesis for amino acids that comprise olefin groups. Those skilled in the art appreciates that other suitable technologies may also be utilized for stapling in accordance with the present disclosure, e.g., those described in WO/2019/051327, WO/2020/041270, etc., the peptide staples and technologies for preparing peptides are incorporated herein by reference.

[0700] For example, in some embodiments, peptides were synthesized on a Liberty Blue peptide synthesizer with 1 M DIC in DMF and 1 M Oxyma in DMF using standard Liberty Blue conditions on either Rink Protide amide resin (primary carboxamides), ethyl indole AM resin (ethyl amides), or amino alcohol 2-chlorotrityl resin (amino alcohols). Single coupling was used for all amino acids, save for residues following a stapling amino acid, which were double coupled. Deprotection was performed on the N-terminal residue, and capping, e.g., acetate capping, was performed by treating the resin with a suitable capping agent, e.g., 5% acetic anhydride, 2.5% diisopropylethylamine and 92.5% NMP for acetate capping, at room temperature for 30 min. In some embodiments, methanesulfonate capping was performed with 10 equivalents of methanesulfonyl chloride and 30 equivalents of diisopropylethylamine in dichloroethane. Non-acetate amide caps were generally performed on the Liberty Blue with standard coupling conditions. Olefin metathesis was performed by treating peptides with suitable metathesis catalysts under suitable conditions, in some embodiments, four cycles of 30 mol% Grubbs' first generation catalyst (CAS 172222-30-9) in dichloroethane at 40 °C for 2 h.

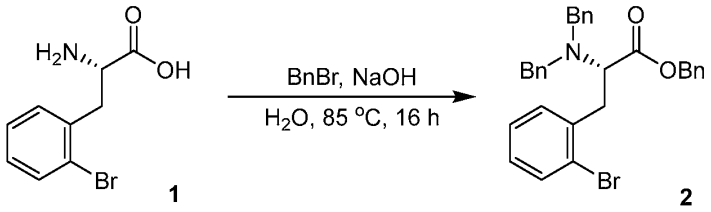
[0701] Side chain functionalization of Dap, Dab and Lys residues was performed by incorporating (ivDde)-protected amino acids, and after olefin metathesis, deprotection with two cycles of 5% hydrazine in DMF at 40 °C for 30 min. Side chain attachment was performed by coupling a carboxylic acid with HATU in DMF and diisopropylethylamine at 40 °C. Side chain functionalization of substituted asparagine residues was performed by incorporating an Asp(2-phenylisopropyl ester) residue, and after olefin metathesis, deprotection with 5% trifluoroacetic acid in dichloromethane for 10 min. Side chain attachment was performed by coupling an amine with HATU and DMF and diisopropylethylamine at 40 °C.

[0702] Peptide cleavage was performed by treating resin with 95% trifluoroacetic acid and 5%

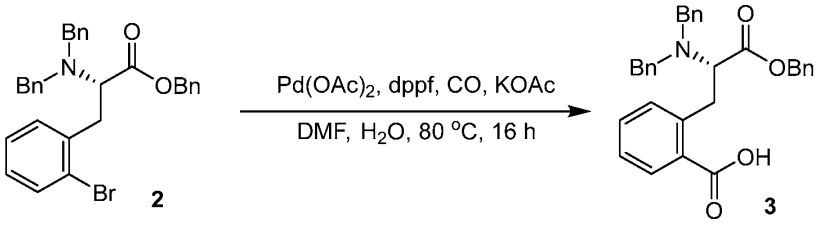
triisopropylsilane for 1 h, and precipitation of the crude peptide in diethyl ether. Purification was performed by preparative HPLC with MS detection and a Waters XSelect CSH C18 column using water with 0.1% formic acid and acetonitrile with 0.1% formic acid. Typically, if isomers were identified and separated by HPLC purification they were isolated and tested separately, otherwise peptides were isolated (often based on HPLC peaks) and tested as combinations (all peptides within a single HPLC peak were tested together in a single composition).

[0703] Amino acids suitable for synthesis are commercially available or can be prepared in accordance with the present disclosure. Certain preparations are presented below as examples.

[0704] Example 1-a. Synthesis of (S)-2-((((9H-fluoren-9-yl)methoxy)carbonyl)amino)-3-(2-(tert-butoxycarbonyl)phenyl)propanoic acid.

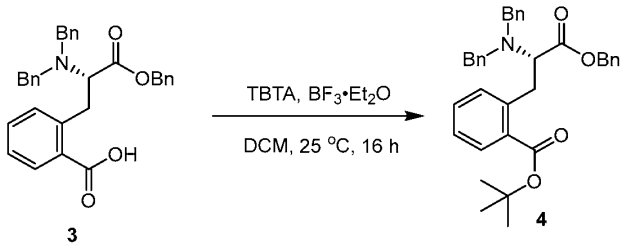


[0705] To a solution of compound 1 in H_2O (250 mL) was added NaOH (84.0 g, 2.10 mol, 5.13 *eq*) and BnBr (328 g, 1.92 mol, 228 mL, 4.69 *eq*). The mixture was stirred at 85 °C for 16 hrs. LC-MS (EW24702-4-P1A) showed the compound 1 was consumed completely, and desired mass was detected (R_t = 1.211min). The mixture was cooled to 40 °C and the aqueous layer was removed. EtOAc (600 mL) and a mixture of methanol and water (1: 2, 300 mL) were added. The mixture was washed with H_2O (300 mL). The organic layer was dried over Na_2SO_4, filtered and concentrated in vacuum. The residue was purified by column chromatography (SiO_2, Petroleum ether/ Ethyl acetate = 1/ 0, Petroleum ether: Ethyl acetate = 10:1, R_f = 0.7). Compound 2 (206 g, 400 mmol, 97.7% yield) was obtained as yellow oil. LCMS: R_t = 1.211 min, m/z = 514.3.1 $(M+1)^+$. ^{1}HNMR ($CDCl_3$, 400 MHz) δ: 7.61 (dd, J_1 = 1.2 Hz, J_2 = 7.6 Hz, 1H), 7.92 - 7.87 (m, 5 H), 7.77 - 7.66 (m, 11H), 7.64 - 7.59 (m, 2H), 5.81 - 5.63 (m, 2H), 4.48 (d, J = 14 Hz, 2H), 4.41 (t, J = 7.6 Hz, 1H), 4.07 (d, J = 14 Hz, 2H), 3.74 - 3.69 (m, 2H).

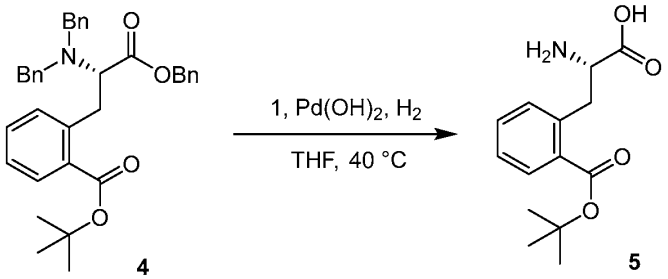


[0706] A mixture of compound **2** (50.0 g, 97.1 mmol, 1.00 *eq*), $Pd(OAc)_2$ (1.09 g, 4.86 mmol, 0.05 *eq*), DPPF (5.39 g, 9.72 mmol, 0.1 *eq*) and KOAc (14.5 g, 147 mmol, 1.52 *eq*) in DMF (400 mL) and

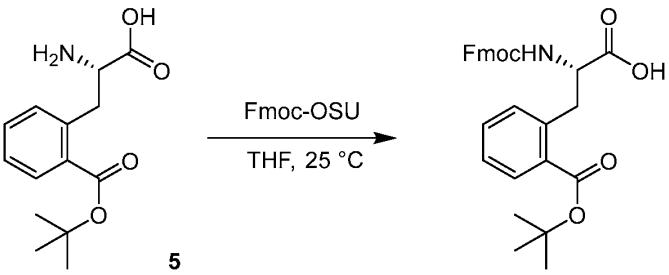
H_2O (100 mL) was degassed and purged with CO for 3 times, and then the mixture was stirred at 80 °C for 16 hrs under CO (50 psi) atmosphere. LC-MS (EW24702-5-P1A) showed the compound 2 wasn't consumed completely, and desired mass was detected (Rt = 1.068 min). The reaction mixture was filtered. The filtrated was extracted with EtOAc (150 mL * 3). The combined organic layers were washed with saturated brine (150 mL * 3), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give a residue. The crude product was purified by reversed-phase HPLC (FA condition). Compound 3 was obtained as yellow oil. LCMS: R_t = 1.068 min, m/z = 480.3 $(M+1)^+$. ^{1}HNMR ($CDCl_3$, 400 MHz) δ: 7.61 (dd, J_1 = 1.2 Hz, J_2 = 7.6 Hz, 1H), 7.44 - 7.39 (m, 8 H), 7.20 - 7.10 (m, 11H), 5.29 (d, J = 12.4 Hz 1H), 5.13 (d, J = 12.4 Hz, 1H), 3.96 (d, J = 13.6 Hz, 2H), 3.90 - 3.86 (m, 1H), 3.60 - 3.57 (m, 2H), 3.48 - 3.43 (m, 2H).



[0707] To a solution of compound 3 (23.0 g, 47.9 mmol, 1.00 *eq*) in THF (300 mL) was added TBTA (52.4 g, 239 mmol, 42.9 mL, 5.00 *eq*), BF_3•Et_2O (680 mg, 4.80 mmol, 591 uL, 0.1 *eq*), the mixture was stirred at 25 °C for 3 hrs. LC-MS (EW24702-8-P1A) showed the compound 3 was consumed completely, and desired mass was detected (R_f = 1.279 min). The reaction mixture was quenched by addition citric acid 100 mL and extracted with EtOAc (200 mL * 3). The combined organic layers were washed with saturated brine (200 mL * 3), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give a residue. The residue was purified by column chromatography (SiO_2, Petroleum ether/ Ethyl acetate = 1/ 0 to 10/ 1, Petroleum ether: Ethyl acetate = 10/ 1, R_f = 0.4). Compound 4 (25.0 g, 46.6 mmol, 97.3% yield,) was obtained as colorless oil. LCMS: EW24702-8-P1A, R_t = 1.279 min, m/z = 536.5 $(M+1)^+$. ^{1}HNMR ($CDCl_3$, 400 MHz) δ: 7.85 (dd, J_1 = 0.8 Hz, J_2 = 1.2 Hz, 1H), 7.42 - 7.29 (m, 7 H), 7.17 - 7.14 (m, 7H), 7.05 - 7.03 (m, 4H), 5.28 (d, J = 12.4 Hz, 1H), 5.16 (d, J = 12.4 Hz, 1H), 3.96 (d, J = 13.2 Hz, 2H), 3.85 - 3.81 (m, 1H), 3.61 - 3.56 (m, 1H), 3.51 (d, J = 14 Hz, 2H), 3.34 - 3.28 (m, 1H), 1.35 (s, 9H). Chiral SFC: Column: Chiralcel OJ-3 50×4.6mm I.D., 3um. Mobile phase: Phase A for CO_2, and Phase B for MeOH (0.05% DEA); Gradient elution: MeOH (0.05% DEA) in CO_2 from 5% to 40%; Flow rate: 3 mL/min; Detector: PDA; Column Temp: 35 °C; Back Pressure: 100 Bar; Chiral purity: 100%.



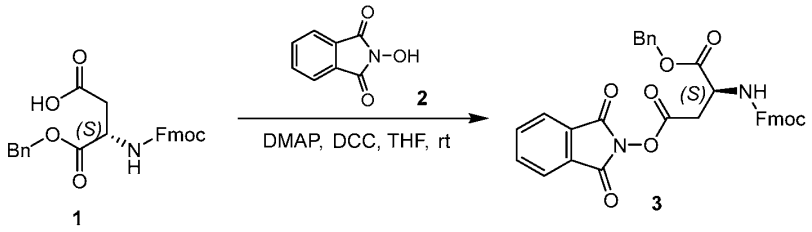
[0708] Two batches were combined together. A mixture of compound 4 (25.0 g, 46.6 mmol, 1.00 *eq*) and $Pd(OH)_2$ (3.00 g, 4.27 mmol, 20.0% purity, $9.15e^{-2}$ *eq*) in THF (750 mL) was degassed and purged with H_2 for 3 times. The mixture was stirred at 40 °C for 16 hrs under H_2 atmosphere (50 psi). LC-MS (EW24072-13-P1C) showed the compound 4 was consumed, desired mass was detected (R_t = 0.740 min). The mixture was filtered, and the filtrated was used to the next reaction directly. LCMS R_t = 0.740 min, m/z = 210.1 $(M-55)^+$.



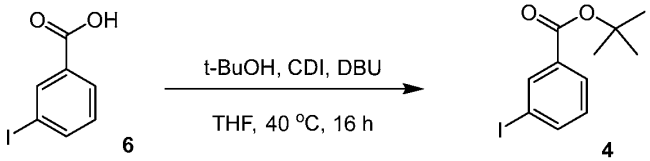
[0709] A mixture of compound 5 (dissolved in THF), FMOC-OSU (11.1 g, 33.1 mmol, 0.8 eq) in THF (50.0 mL) was degassed and purged with N_2 for 3 times, and then the mixture was stirred at 25 °C for 12 hrs. LC-MS (EW24702-14-P1A) showed the compound 5 was consumed completely, and desired mass was detected (R_t = 0.998 min). The mixture was filtered, and filtrated was concentrated under vacuum. Three batches were combined together. The mixture was purified with reversed-phase HPLC (TFA condition). 2COOHF (13.2 g, 19.1 mmol, 46.2% yield, 98.3% purity) was obtained as yellow solid. LCMS R_t = 0.983 min, m/z = 510.2 $(M+23)^+$; HPLC R_t = 3.49 min, purity: 98.3%. ^{1}HNMR (DMSO, 400 MHz) δ: 12.7 (s, 1H), 7.87 (d, J = 7.6 Hz, 2H), 7.76 - 7.68 (m, 2H), 7.63 - 7.59 (m, 2H), 7.42 - 7.40 (m, 2H), 7.38 - 7.34 (m, 2H), 7.32 - 7.30 (m, 2H), 7.29 - 7.26 (m , 2H), 4.31 - 4.29 (m, 1H), 4.21 - 4.15 (m, 2H), 4.13 - 4.10 (m, 1H), 3.54 (d, J = 5.2 Hz, 1H), 3.00 - 2.96 (m, 1H), 1.54 (s, 9H). Chiral SFC: Chiral purity: 100%; Column: Chiralcel OJ-3 50×4.6mm I.D., 3um; Mobile phase: Phase A for CO_2, and Phase B for MeOH(0.05%DEA); Gradient elution: MeOH (0.05% DEA) in CO2 from 5% to 40%; Flow rate: 3mL/min; Detector: PDA; Column Temp: 35 °C; Back Pressure: 100Bar): Chiral purity: 100%.

[0710] Example 1-b. Synthesis of tert-butyl (S)-3-(2-((((9H-fluoren-9-yl)methoxy)carbonyl)amino)-

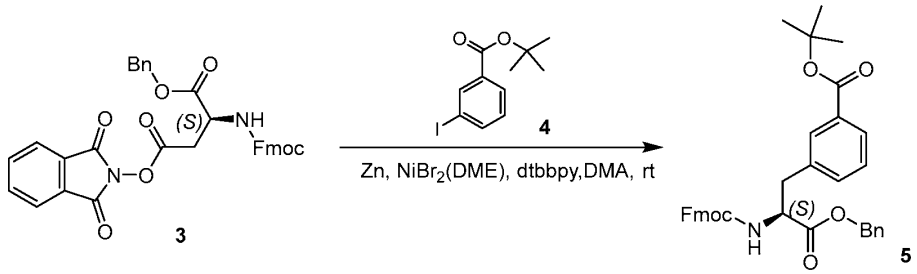
3-(benzyloxy)-3-oxopropyl)benzoate.



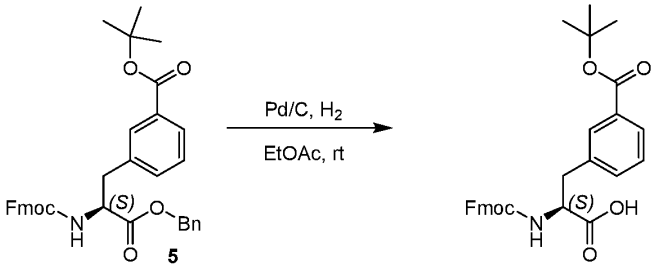
[0711] A mixture of compound 1 (90.0 g, 202 mmol, 1.00 *eq*), compound 2 (49.4 g, 303 mmol, 1.50 *eq*), DCC (50.0 g, 242 mmol, 49.0 mL, 1.20 *eq*), DMAP (1.23 g, 10.1 mmol, 0.0500 *eq*) in THF (100 mL) was degassed and purged with N_2 for 3 times, and then the mixture was stirred at 20 °C for 12 hrs under N_2 atmosphere. LC-MS (EW23957-10-P1B) showed the compound 1 was consumed completely, and desired mass was detected (R_t = 1.046min). The mixture was filtered, and the filtrate was concentrated in vacuo. The crude product was purified by reversed-phase HPLC (0.1 % FA condition). Compound 3 (68.0 g, 115 mmol, 56.9% yield) was obtained as a white solid. LCMS R_t = 1.046 min, m/z = 613.1 $(M+23)^+$. ^{1}HNMR (DMSO, 400 MHz) δ: 8.11 (d, J = 8.4 Hz, 1H), 7.98 - 7.96 (m, 4 H), 7.89 (d, J = 7.6 Hz, 2H), 7.69 (d, J = 7.6 Hz, 2H), 7.42 - 7.28 (m, 10H), 5.16 (d, J = 2.0 Hz, 2H), 4.64 - 4.62 (m, 1H), 4.33 - 4.31 (m, 2H), 4.24 - 4.21 (m, 1H), 3.39 - 3.37 (m, 1H), 3.25 - 3.19 (m, 1H).



[0712] To a solution of compound 6 (100 g, 403 mmol, 1.00 *eq*) in THF (500 mL) was added CDI (71.9 g, 443 mmol, 1.10 *eq*) and the mixture was stirred for 0.5 h. 2-methylpropan-2-ol (387 g, 5.23 mol, 500 mL, 12.9 *eq*) and DBU (67.5 g, 443 mmol, 66.8 mL, 1.10 *eq*) were subsequently added to the reaction. The mixture was stirred at 40 °C for 11.5 hrs. TLC (Petroleum ether: Ethyl acetate = 5/ 1) showed the compound 6 was consumed completely (R_f = 0.15), and two main spots were observed (R_t = 0.90, 0). H_2O (500 mL) was added to the reaction. The mixture was extracted with EtOAc (500mL * 3). The combined organic layers were washed with saturated brine (500 mL * 3), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give a residue. The residue was purified by column chromatography (SiO_2, Petroleum ether/ Ethyl acetate = 0/ 1, R_f = 0.90). Compound 4 (113 g, 371 mmol, 92.1% yield) was obtained as a light yellow oil. ^{1}HNMR (DMSO, 400 MHz) δ: 8.16 (t, J = 1.6 Hz, 1H), 7.97 (m, 1H), 7.89 (m, 1H), 7.30 (t, J = 8.0 Hz, 1H), 1.53 (s, 9H).



[0713] A solution of dibromonickel;1,2-dimethoxyethane (2.85 g, 9.25 mmol, 7.03 e^{-2} *eq*) and 4-tert-butyl-2-(4-tert-butyl-2-pyridyl)pyridine (2.48 g, 9.24 mmol, 7.03 e^{-2} *eq*) in DMA (500 mL) was stirred at room temperature for 0.5 hr. Compound 3 (68.0 g, 115 mmol, 8.75 e^{-1} *eq*), compound 4 (40.0 g, 131 mmol, 1.00 *eq*), dodecane (15.0 g, 88.0 mmol, 20.0 mL, 0.670 *eq*) , Zn (30.0 g, 458 mmol, 3.49 *eq*) were added to the reaction. The mixture was stirred at 25 °C for 2.5 hrs. LC-MS (EW23957-16-P1A) showed Compound 3 was consumed completely, and desired mass was detected (R_t = 1.126min). The reaction mixture was quenched by the addition of HCl (500 mL). The resulting mixture was extracted with EtOAc (500 mL * 3). The combined organic layers were washed with saturated brine (500 mL * 3), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give a residue. The crude product was purified by reversed-phase HPLC (0.1% FA condition). Compound 5 (35.0 g, 60.5 mmol, 46.0% yield) was obtained as a yellow oil. LCMS R_t = 1.126 min, m/z = 623.2 $(M+46)^+$. ^{1}HNMR ($CDCl_3$, 400 MHz) δ: 7.88 (d, J = 7.6 Hz, 1H), 7.80 -7.76 (m, 3H), 7.56 (t, J = 7.2 Hz, 2H), 7.42 - 7.29 (m, 10H), 7.20 - 7.19 (m, 1H), 5.37 (d, J = 8.0 Hz, 1H), 5.17 (d, J = 2.8 Hz, 2H), 4.81 - 4.71 (m , 1H), 4.42 - 4.36 (m, 2H), 4.13 - 4.20 (m, 1H), 3.21 - 3.17 (m, 2H), 1.58 (s, 9H).

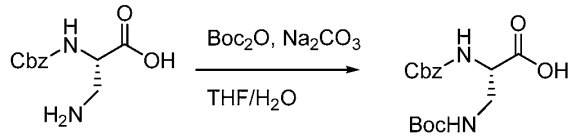


[0714] To a solution of compound 5 (35.0 g, 60.5 mmol, 1.00 *eq*) in EtOAc (50.0 mL) was added Pd/C (3.50 g, 10.0% purity). The mixture was stirred at 25 °C for 2 hrs under H_2 (15 psi) atmosphere. LC-MS (EW23957-19-P1A) showed that compound 5 was consumed, and desired mass was detected (R_t = 0.991min). The mixture was filtered, and the filtrate was concentrated in vacuo. The mixture was purified by reversed-phase HPLC (FA condition). The final product (23.5 g, 48.0 mmol, 79.2% yield, 99.6% purity) was obtained as a white solid. LCMS R_t = 1.088 min, m/z = 510. $(M+23)^+$. HPLC R_t = 3.51 min, purity: 99.6%. ^{1}HNMR (DMSO, 400 MHz) δ: 7.87 - 7.84 (m, 3H), 7.80 - 7.74 (m, 2H), 7.62 -

7.51 (m, 3H), 7.41 - 7.37 (m, 3H), 7.31 - 7.23 (m, 2H), 4.24 - 4.20 (m, 1H), 4.20 - 4.19 (m, 2H), 4.19 - 4.14 (m , 1H), 3.18 - 3.13 (m, 1H), 2.98 - 2.91 (m, 1H), 1.51 (s, 9H). SFC: Chiral purity: 99.5%.

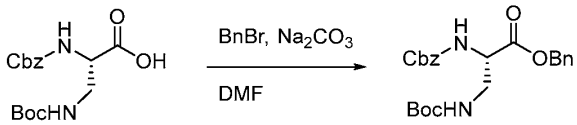
[0715] Example 1-c. Synthesis of TfeGA.

[0716] Step 1: (S)-2-(((benzyloxy)carbonyl)amino)-3-((tert-butoxycarbonyl)amino)propanoic acid



[0717] A mixture of (S)-3-amino-2-(((benzyloxy)carbonyl)amino)propanoic acid (20 g, 84 mmol), $(Boc)_2O$ (36.6 g, 168 mmol) and Na_2CO_3 (17.8 g, 168 mmol) in THF (400 mL) and water (250 mL) was stirred at room temperature for 3 h. The mixture was titrated with 1N HCl until the pH reached 3~4. The aqueous phase was extracted with DCM (3 × 500 mL). The organic layers were collected, dried, and concentrated to afford the crude product (28.5 g, 100% yield) as a white solid. MS (ESI): m/z =361.1 $[M+Na]^+$.

[0718] Step 2: Benzyl (S)-2-(((benzyloxy)carbonyl)amino)-3-((tert-butoxycarbonyl)amino) propanoate



[0719] A mixture of (S)-2-(((benzyloxy)carbonyl)amino)-3-((tert-butoxycarbonyl)amino) propanoic acid (28.5 g, 84.3 mmol), benzyl bromide (21.6 g, 126.5 mmol) and Na_2CO_3 (17.8 g, 168.7 mmol) in DMF (500 mL) was stirred at room temperature for 3 h. The reaction mixture was diluted with ethyl acetate (2 L), washed with brine (5 × 500 mL), dried over Na_2SO_4 and filtered. The filtrate was concentrated and the crude mixture was purified by silica gel column chromatography (eluted with hexane/ ethyl acetate = 4:1, V/V) to afford the product (35.5 g, 99% yield) as a colorless oil. MS (ESI): m/z =451.1 $[M+Na]^+$.

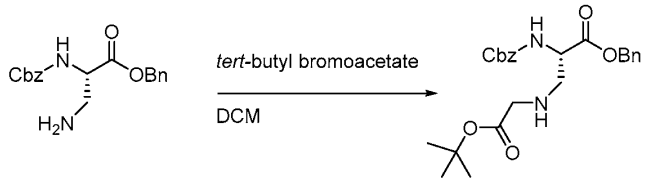
[0720] Step 3: Benzyl (S)-3-amino-2-(((benzyloxy)carbonyl)amino)propanoate



[0721] A mixture of benzyl (S)-2-(((benzyloxy)carbonyl)amino)-3-((tert-butoxycarbonyl) amino)propanoate (35.5 g, 82.9 mmol) in TFA (100 mL) and DCM (100 mL) was stirred at room temperature for 3 h, then solvent was removed under reduced pressure. The mixture was titrated with sat. $NaHCO_3$ until the pH reached 8~9. The aqueous phase was extracted with DCM (3 × 1000 mL). The

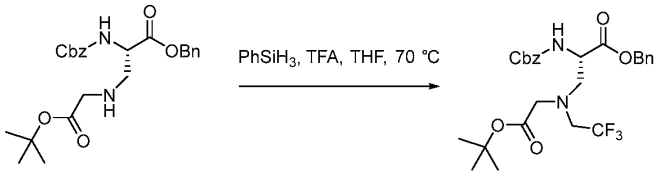
organic layers were combined, dried, and concentrated to afford the product (26.8 g, 98.5% yield) as a colorless oil. MS (ESI): m/z =329.1 $[M+H]^+$.

[0722] Step 4: Benzyl (S)-2-(((benzyloxy)carbonyl)amino)-3-((2-(tert-butoxy)-2-oxoethyl)amino) propanoate



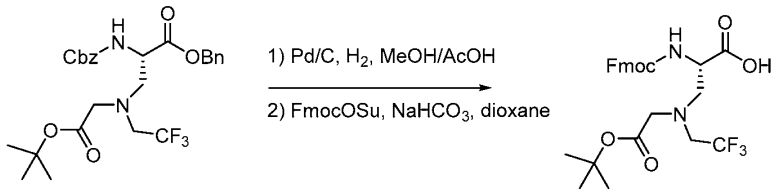
[0723] A mixture of benzyl (S)-3-amino-2-(((benzyloxy)carbonyl)amino)propanoate (13.5 g, 41.1 mmol) and tert-butyl 2-bromoacetate (8.03 g, 41.1 mmol) in DCM (250 mL) was stirred at room temperature for 2 days. Et_2NH (3 g, 41.1 mmol) was added and the reaction mixture was stirred at room temperature for 1 h. The mixture was titrated sat. $NaHCO_3$ until pH reached 8~9. The aqueous phase was extracted with DCM (3 × 500 mL). The organic layers were combined, dried, and concentrated. The crude mixture was purified by silica gel column chromatography (eluted with hexane/ ethyl acetate = 4:1, V/V) to afford the product (8.2 g, 45% yield) as a colorless oil. MS (ESI): m/z =443.2 $[M+H]^+$.

[0724] Step 5: Benzyl (S)-2-(((benzyloxy)carbonyl)amino)-3-((2-(tert-butoxy)-2-oxoethyl) (2,2,2-trifluoroethyl)amino)propanoate



[0725] To an oven-dried 500 ml round-bottomed flask fitted with a water condenser under an argon atmosphere (balloon) was added tetrahydrofuran (400 mL) and benzyl (S)-2-(((benzyloxy)carbonyl)amino)-3-((2-(tert-butoxy)-2-oxoethyl)amino)propanoate (11.5 g, 26 mmol) as the free base. The reaction flask was heated in an oil bath at 70 °C. Phenylsilane (14.0 g, 130 mmol) in THF (25 mL) was added immediately via syringe, followed by TFA (14.1 g, 123.6 mmol) in THF (25 mL). The reaction was stirred at reflux for 4 h. The mixture was concentrated and titrated with sat. $NaHCO_3$ until pH reached 8~9. The aqueous phase was extracted with DCM (3 × 500 mL). The organic layers were combined, dried, and concentrated. The crude mixture was purified by silica gel column chromatography (eluted with hexane/ ethyl acetate = 6:1, V/V) to afford the product (11.2 g, 82% yield) as a colorless oil. MS (ESI): m/z =525.0 $[M+H]^+$.

[0726] Step 6: (S)-2-((((9H-fluoren-9-yl)methoxy)carbonyl)amino)-3-((2-(tert-butoxy)-2-oxoethyl)(2,2,2-trifluoroethyl)amino)propanoic acid



[0727] A mixture of benzyl (S)-2-(((benzyloxy)carbonyl)amino)-3-((2-(tert-butoxy)-2-oxoethyl)(2,2,2-trifluoroethyl)amino)propanoate (5.5 g, 10.5 mmol) and palladium on carbon (3 g, 10%) in MeOH (200 mL) and AcOH (8 mL) was attached to a hydrogenation apparatus. The system was evacuated and then refilled with hydrogen. The mixture was stirred at room temperature for 16 h. The reaction mixture was filtered. The filtrate was concentrated and re-dissolved in dioxane (150 mL) and water (150 mL). FmocOSu (3.36 g, 10 mmol) and $NaHCO_3$ (4.41g, 52.5 mmol) were added. The mixture was stirred at room temperature for 16 h. The mixture was titrated with 0.5 N HCl until pH reached 4. The aqueous phase was extracted with ethyl acetate (3 × 500 mL). The organic layers were combined, dried, and concentrated. The crude mixture was purified by combiflash on C18 (0-80% MeCN/H_2O) to give the product (3.5 g, 64% yield) as a white solid. MS (ESI): m/z =523.0 $[M+H]^+$. ^1H NMR, 400 MHz, DMSO-d6, δ 12.73 (s, 1H); 7.90 (d, J = 7.6 Hz, 2H); 7.72 (d, J = 7.6 Hz, 2H); 7.59 (d, J = 8 Hz, 1H); 7.42 (t, J = 7.2 Hz, 2H); 7.30 (t, J = 7.2 Hz, 2H); 4.29-4.21 (m, 3H); 4.14-4.09 (m, 1H); 3.54-3.42 (m, 4H); 3.19 (dd, J1 = 14.2 Hz, J2 = 4.8 Hz, 1H); 3.00-2.95 (m, 1H); 1.42 (s, 9H).

[0728] **Example 2. Provided technologies can provide improved properties and/or activities.**

[0729] Among other things, the present disclosure provides technologies for modulating properties and/or activities of products such as peptides through, e.g., incorporation of certain amino acid residues. As demonstrated herein, various amino acid residues, such as TfeGA and 3COOHF, can provide certain modulated properties (e.g., improved lipophilicity (in some instances, assessed by LogD values)) and/or activities compared to comparable residues (e.g., Aad, Asp, etc.) without significant negative impact on other properties and/or activities (e.g., solubility, binding to target proteins like beta-catenin, etc.). For example, as shown in Table E1, in some embodiments, the present disclosure provides peptides with increased lipophilicity. In some embodiments, the present disclosure provides peptides with improved LogD. In some embodiments, improvements are achieved by replacing an amino acid residue whose side chain comprises an acidic group (e.g., −COOH) but no amino group (e.g., Asp, Aad, etc.; a peptide comprising such an amino acid residue may be utilized in some embodiments as a reference peptide (e.g., when compared to a peptide in which such an amino acid residue (e.g., Asp, Aad, etc.) is replaced (e.g., with TfeGA) and which is otherwise identical)) with an amino acid residue whose side chain comprises an acidic group (e.g., −COOH) and an amino group (e.g., −N(R')−)(e.g., TfeGA). In some embodiments, provided technologies can improve lipophilicity, LogD, etc. without undesirably impacting other

properties and/or activities (e.g., solubility, target binding, etc.). In some embodiments, one or more additional properties and/or activities in addition to LogD were improved compared to reference peptides (e.g., peptides comprising an amino acid residue whose side chain comprises an acidic group (e.g., −COOH) but no amino group (e.g., Asp, Aad, etc.) but are otherwise identical).

[0730] In some embodiments, LogD was measured using a CHI LogD procedure: 3 uL of a 0.2 mM solution of peptide in 90% DMSO was injected onto a Phenonenex Gemini 3 um C18 110A column (50x3 mm), eluting with a gradient of 50 mM ammonium acetate pH 7.4 and acetonitrile. The retention time was compared to a standard calibration solution of 10 compounds to derive CHI LogD:

Compound	Gradient tR at pH 7.4	CHI at pH 7.4
Theophylline	1.671	18.40
Phenyltetrazole	1.768	23.60
Benzimidazole	1.911	34.30
Colchicine	2.132	42.00
Phenyltheophylline	2.271	51.20
Acetophenone	2.475	65.10
Indole	2.642	71.50
Propiophenone	2.734	77.40
Butyrophenone	2.932	87.50
Valerophenone	3.113	96.20

[0731] In some embodiments, solubility was assessed as follows: 50 uM peptide was incubated in 99.5% PBS/0.5% DMSO at 37 °C for 15 min. After ultracentrifugation of the PBS solution, the supernatant was analyzed by HPLC and compared to an HPLC injection 50 μM peptide DMSO solution. Solubility was determined by: [(Area of PBS peak)/(Area of DMSO peak)]*50 uM.

[0732] Table E1. Certain data for several peptides.

Compound ID	Notes	bCat FP IC50 (nM)	LogD	Solubility (uM)	NanoBRET IC50
I-612	only staple isomer isolated	64	2.4	>25	
I-608	Staple isomer 1	211	2.5	>25	n.d.
I-609	Staple isomer 2	80	2.5	>25	n.d.
I-610	Staple isomer 1	54	2.6	>25	n.d.
I-611	Staple isomer 2	55	2.6	>25	n.d.
I-686	Staple isomer 1	<5	2.0	>25	7.5 uM
I-687	Staple isomer 2	12	2.0	>25	n.d.
I-761	Staple isomer 1	<5	2.2	>25	5 uM
I-762	Staple isomer 2	6	2.2	>25	n.d.

n.d.: not determined

[0733] Example 3. Various provided peptides can bind to beta-catenin.

[0734] As those skilled in the art will appreciate, many technologies can be utilized in accordance with the present disclosure to assess binding to targets such as beta-catenin. Certain useful technologies and results are described below as examples.

[0735] In some embodiments, an assay is fluorescence polarization. A useful protocol is described below as an example.

[0736] Fluorescence polarization IC50: Using the Mosquito (SPT) peptide solutions were 3-fold serially diluted in 90% DMSO and 40 nL of titrated peptide was added into 20 uL buffer (50 mM HEPES, pH 7.5, 125 mM NaCl, 2% glycerol, 0.5mM EDTA, 0.05% v/v pluronic acid) for final concentrations of 10 uM to 5 nM plated by Multidrop™ Combi (Thermo Scientific) into a black polystyrene 384-well plate (Corning). Probe solution (10 nM full-length beta-Catenin (Uniprot ID P35222), mixed with 10 nM 5FAM labeled TCF4 residues 10-53 (Uniprot ID Q9NQB0) peptide in buffer) was prepared and 20 uL per well was plated using a Multidrop™ Combi (Thermo Scientific). The plate was incubated protected from light for 60 minutes at 20 °C prior to read. Reads were performed on a CLARIOstar plate reader (BMG Labtech) in duplicate, and data were fitted to a 1:1 binding model with hill slope using an in-house script. All provided concentrations are final concentrations.

[0737] In some embodiments, an assay is an Alphascreen binding assay. A useful protocol is described below as an example.

[0738] Alphascreen binding assay: Using the AlphaScreen Histidine (Nickel Chelate) Detection Kit (PerkinElmer), peptide solutions were prepared in buffer (50 mM Tris pH 8.0, 250 mM NaCl, 2% glycerol, 0.03% Tween-20, 0.01% TritonX-100, 0.1% BSA w/v) using a 3-fold serial dilution from 10 uM to 5 nM. Probe solution (65 nM full-length ß-Catenin (Uniprot ID P35222), mixed with 10nM biotin labeled TCF4 residues 10-53 (Uniprot ID Q9NQB0) peptide in buffer) was prepared and 4 uL per well was plated in a white polystyrene 384-well plate (Corning). Equal volume of the titrated peptide was added to the plate and incubated for 15 minutes at 20°C. Then 4 uL of donor and 4 uL acceptor beads at 10 ug/mL were added to the plate, for a 16 uL reaction pool and protected from light for 60 minutes at 20 °C prior to read. Reads were performed on a CLARIOstar plate reader (BMG Labtech) in duplicate, and data were fitted to a 1:1 binding model with hill slope using an in-house script. All provided concentrations are final concentrations.

[0739] Example 4. Provided technologies can modulate interactions with beta-catenin in cells.

[0740] Various technologies may be utilized to assess properties and/or activities of provided compounds, e.g., stapled peptides, in cells. In some embodiments, a useful assay is Nano-BRET target engagement assay that assesses beta-catenin/TCF4 engagement. A useful protocol is described below as

an example.

[0741] On Day 1, HEK293 cells were seeded. Use cells at ~ 70% confluency. Trypsinize cells without washing with PBS as these cells can be fragile and come off easily. (e.g. 5 ml trypsin/75 flask for 2-5 min @ Rm Temp). Quench trypsin with 10 mL MEM media. Transfer cells to a falcon tube. Spin down @ 250 g for 5 minutes at Rm Temp. Discard SN. Gently re-suspend the cells in 10 mL MEM media. Count the cells twice and calculate how many cells are needed. Plate Parental HEK293 Cell Line at 7 M cells/12 ml/75 cm2 flask using MEM media. Rock plate a couple of times to disperse cells evenly. Incubate at 37 °C, 5% CO2 for 5 hours. Cells should be evenly spread and about 70% confluent after 5h.

[0742] Transfection of Nano-BRET constructs (B-cat-Halo & TCF4-Luc): Allow Fugen-HD transfection reagent to reach room temperature. Mix by inverting tube, if precipitate is visible, warm up to 37 °C and them cool to Rm Temp. Check Flasks under microscope for confluency of cells (70-80%). Add LiCl to flask containing cells (LiCl 30 mM working concentration - LiCl can be a GSK3 inhibitor and reduce beta-catenin degradation). Prepare the transfection mix in a tube containing Assay media based on the manufacturer instruction (see below table for an example):

Transfection mix preparation

#	Constructs	# of Flasks	Ratio	DNA (ug)	FuGene (6 ul/w)	Opti-MEM (ul)
1-a	Bcat-Halo	1	4	12.8	48	736
1-b	TCF4-Luc	1	1	3.2		

Add FuGene last and gently mix. Don't vortex. Incubate transfection mix at RT for 10-15 minutes. If more than one target pair is going to be tested, calculate the amounts of transfection mix using the above table for other construct pairs. Gently add 700 uL of transfection mix per flask and gently rock the plate a couple of times. Incubate cells at 37 °C, 5% CO2 for 18-24 hours.

[0743] On Day 2, transfected cells were harvested and re-plated in 96-well plates. Collect media from flask in a Falcon tubes. This was to harvest the floaters as they may still be viable and transfected. Trypsinize cells without washing with PBS (5 ml trypsin/Flask). Quench trypsin with 5 mL of MEM media. Collect cells and add to falcon tube. Wash the flask with 5-10 ml of MEM media and add to falcon tube. Spin down @ 250 g for 5 minutes at Rm Temp. Discard SN. Gently Re-suspend cells in 5 ml Assay media (optionally containing LiCl). Count the cells twice and calculate the average count. Dispense 80 uL of cell suspension per each well of 96-well plate (20,000 cells/80 uL/well) (use plate such as Corning Solid White Flat Bottom TC-treated plate). LiCl at 30 mM concentration. Typically no cells to wells at the edge of the plate, instead add Assay media to these wells. Incubate cells at 37 °C, 5% CO2 until peptide dilutions are ready.

[0744] Preparation of addition of compounds: Prepare a 10X Dose curve plate by serial dilution.

Prepare Row A of Dose Curve Plate in Assay Media only (for 20 uM top conc. We need a 1/50 dilution of 10 mM). Prepare Assay Media plus DMSO (mix 9.8 part media + 0.2 part DMSO) (e.g. 9.8 ml of Assay Media + 0.2 ml of DMSO). 1:2 serial dilutions: Transfer Vol needed (50 uL) from Row A to Row B, mix 3 times, discard the tips. Continue 1:2 dilutions in each row by transferring 50 uL from higher dilution to lower dilution (e.g. 50 uL from Row B to C, etc.) Discard Vol needed (50 uL) from the last dilution (Row F).

A useful dose curve plate map (6 point; typically use a V-bottom or U-bottom non-treated 96-well plate)

Pep 1	Pep 2	Pep 3	Pep 4	Pep 5	Pep 6	Pep 7	Pep 8	Pep 9	Pep 10	Pep 11	Pep 12
1	2	3	4	5	6	7	8	9	10	11	12
200											
100											
50											
25											
12.5											
6.25											
Empty											
Empty											

A useful dose curve plate map (3 point; typically use a V-bottom or U-bottom non-treated 96-well plate)

Pep 1	Pep 2	Pep 3	Pep 4	Pep 5	Pep 6	Pep 7	Pep 8	Pep 9	Pep 10	Pep 11	Pep 12
1	2	3	4	5	6	7	8	9	10	11	12
200											
100											
50											
Empty											
200											
100											
50											
Empty											
Pep 13	Pep 14	Pep 15	Pep 16	Pep 17	Pep 18	Pep 19	Pep 20	Pep 21	Pep 22	Pep 23	Pep 24

[0745] Prepare Assay plates + Peptide + Ligand

[0746] Certain wells are without cells, containing 100 uL of Assay media to avoid edge effect. Transfer 10 uL of each peptide dilution to corresponding well in Assay plate [containing cells (80 uL)] to achieve 1:10 final working dilution of peptides. Dilute HaloTag® NanoBRET™ 618 Ligand 1:100 in Assay media (Opti-MEM + 4% FBS). Add 10 uL of Ligand per well of Assay plate (80 uL cell + 10 uL compound + 10 uL Ligand). Adjust the volume in control wells by adding Media or Media + DMSO to corresponding wells. Plus ligand = Add 10 uL Media + DMSO, or Media (for Media only control). No

ligand = Add 10 uL Media + DMSO, or Media and add another 10 uL of media to top up to 100 uL. Incubate at 37 °C, 5% CO2 overnight. A useful assay plate map - (use Corning Solid White Flat Bottom TC-treated plate) as example (0.5% DMSO in assay plate):

		1	2	3	4	5	6	7	8	9	10	11	12
Dose (uM)	A												
20	B	Peptide 1			Peptide 2			Peptide 3			Peptide 4		
10	C												
5	D												
2.5	E												
1.25	F												
0.625	G												
	H	Media + DMSO (No Ligand)						Media + DMSO + Ligand					

[0747] In some embodiments, peptide 1 is I-797, and peptide 2 is I-686.

[0748] On Day 3, fluorescence was read with Nano-BRET substrates. Remove plates from incubator to allow to reach to RT (30 min). Also equilibrate CTG reagent to Rm Temp. Dilute Nano-BRET substrate 1:100 in Assay media. Add 25 uL of diluted substrate to each well and shake for 30 seconds. Read on ClarioSTAR or GloMAX right away (within 10 min). Donor emission @ 460 nm. Acceptor emission @ 618 nm. Use the same plate to measure cell viability (Cell Titer-Glo-2.0 (CTG) Viability test). After reading BRET signal, add CTG reagent to each well at 1:2 ratio and shake on orbital shaker for 2 min. Incubate at Rm Temp for 10 - 30 min. Read luminescence on ClarioSTAR or GloMAX. Analysis was performed using Prism. Non-linear regression. Log (inhibitor) vs response - variable slope (four parameters). For CTG data linear values (not logarithmic).

[0749] Certain results were presented below:

CTG (CellTiter Glo):

Conc. (uM)	Relative to Media					
	I-822			I-797		
20	82	83	92	92	91	92
10	90	90	92	100	100	102
5	94	95	95	102	100	104
2.5	99	98	98	103	107	105
1.25	94	98	99	104	103	101
0.625	100	102	104	104	104	103
Media	109	96	96			
Avg of media	100					

BRET (Donor: 450 BP; Acceptor: 600 LP; Integration 0.3 s; Reading 1)

Donor 450 BP

	1	2	3	4	5	6	7	8	9	10	11	12
A		I-822			I-797							
B		59340	52650	45840	58480	55870	47990					
C		54740	47760	46640	58470	25870	40350					
D		56000	46130	45780	38850	29900	47500					
E		54130	32300	33550	34130	22720	40100					
F		38290	28720	18860	21810	34520	71060					
G		78090	58990	23030	25180	35670	47630					
H												

Acceptor 600 LP

	1	2	3	4	5	6	7	8	9	10	11	12
A		I-822			I-797							
B		450	450	280	860	660	640					
C		490	470	470	790	350	470					
D		630	600	430	510	420	630					
E		740	360	420	460	220	510					
F		470	380	260	300	410	860					
G		1120	720	260	410	440	530					
H												

% Inhibition:

Concentration (uM)	I-822			I-797		
20	52.9	40.7	71.4	-36.7	-0.3	-19.5
10	35.7	24.5	21.5	-21.7	-21.9	1.7
5	6.8	-15.3	30.1	-16.9	-28.4	-18.6
2.5	-23.7	8.1	-9.2	-21.3	26.5	-11.7
1.25	-6.1	-18.2	-25.1	-24.8	-1.1	-4.0
0.625	-32.1	-5.3	6.3	-56.5	-6.9	8.3

[0750] In some embodiments, it was observed that amino acids with non-polar side chains (e.g., Leu) at X^{10} may provide improved affinity compared to amino acids with polar side chains (e.g., Asn). For example, see I-761 (X^{10} =Asn, NanoBRET IC50 = 5 uM) and I-849 (X^{10} =Leu, NanoBRET IC50 = 2.3 uM).

[0751] Among other things, NanoBRET data (and/or data from certain other assessments) indicated on-target activity. In some embodiments, optimization of certain residues, e.g., one or more residues at X^2, X^5, X^9, X^{12} and/or X^{13}, can improve binding affinity (e.g., I-926 to I-921).

[0752] Certain data of various peptides are presented in Table E2 as examples.

[0753] Various technologies may be utilized to deliver provided compounds, including various peptides, and compositions. In some embodiments, lipids are utilized to deliver provided compounds and compositions. In some embodiments, lipids form positively charged complexes with provided compounds, e.g., various peptides. In some embodiments, lipids non-covalently associate with provided compounds. In some embodiments, lipids non-covalently associate with provided compounds to form positively charged complexes. In some embodiments, the present disclosure provides a composition comprising a provided compound, e.g., a stapled peptide, and a lipid. In some embodiments, a lipid is SAINT-Protein (ST-Protein, Synvolux). Certain results are present below. As demonstrated, lipids can improve activities of various peptides:

Nano-BRET:

Abs IC50 (uM)	I-1001 (neg.)	I-849	I-922	I-762	I-993
Peptide only	inactive	5	6	11	7
Peptide+ST-Protein	inactive	0.7	1	0.7	0.9

TCF Reporter Assay:

Abs IC50 (uM)	I-1001 (neg.)	I-849	I-922	I-762	I-993
Peptide only	inactive	5	5	7	5
Peptide+ST-Protein	inactive	0.2	0.2	0.3	0.2

[0754] Assay were performed essentially as described above. Prepare 100X peptide dose curve in DMSO, then add fixed amount to HEPES in Pool B. Add SAINT-Protein (StPhD) in HEPES to achieve 10X mix, incubate at Rm Temp and add 10 uL to 90 uL of Cells + Ligand in cell culture plate.

Conditions				Pool A	Pool B			
Ratio of Pep:StPhD	Dose (uM) in final plate	Dose prep (10X)	Final Vol (Pep + StPhD)	StPhD ratio (uL)	Peptide prep in DMSO (uL)	HEPES minus peptide (uL)	Assay media + LiCl	% StPhD in 400 uL media
peptide only	20	200	50	0	5.0	45.0	450	0.0
	10	100	50	0	5.0	45.0	450	0.0
	5	50	50	0	5.0	45.0	450	0.0
	3	25	50	0	5.0	45.0	450	0.0
	1	13	50	0	5.0	45.0	450	0.0
	0.6	6	50	0	5.0	45.0	450	0.0
2.5:1 (Pool B: Pool A)	20	200	50	14.3	5.0	30.7	450	2.9
	10	100	50	14.3	5.0	30.7	450	2.9
	5	50	50	14.3	5.0	30.7	450	2.9

	3	25	50	14.3	5.0	30.7	450	2.9
	1	13	50	14.3	5.0	30.7	450	2.9
	0.6	6	50	14.3	5.0	30.7	450	2.9

[0755] Transfer 10 uL / 96 well corresponding wells which contain seeded cells in 80 uL media. To prepare DMSO control add 5 uL DMSO to 50 uL HEPES (same as peptide only prep). Add 10 uL of 1/100 dilution of ligand at the end (total volume is 20,000 cells/100 uL). Incubate at 37 °C, overnight. Process data next day based on protocol sheet.

[0756] The "Rokhand-NanoBRET_Bcat_Protocal_Saint protein" Excel file contain CTG and GloMax reading data. What peptides were they for? It also mentioned the following peptides - were they tested? If yes, where are the data?

#	ID	Volume (ul)
1	I-922	40
2	I-762	40
3	I-993	40
4	I-1001	40
7	I-849	40

[0757] **Example 5. Provided technologies can modulate beta-catenin functions in cells.**

[0758] As demonstrated in Figure 1, provided technologies can modulate functions of beta-catenin in cells. Among other things, provided technologies can modulate expression levels of various genes regulated by beta-catenin/TCF. In some embodiments, provided technologies can reduce expression of certain genes such as AXIN2 and MYC. I-796 is a negative control. A useful cell-based assay is described below.

[0759] A protocol for a gene expression assay:

[0760] Cell Line: The SW620 cell line was purchased from ATCC (ATCC CCL-227) and was grown in RPMI-1640 medium supplemented with 10% FBS (ThermoFisher Catalog # 11875093, Catalog# 10082147). Cell line was maintained in an incubator with a 5% CO2 atmosphere at 37°C.

[0761] Materials:

RNeasy Mini Kit Qiagen Catalog number: 74104

Primer/Probes from Applied Biosystems – Life Technology (20X)

Applied Biosystems High-Capacity cDNA Reverse Transcription Kit, Catalog number: 4368814

Applied Biosystems TaqMan Fast Advanced Master Mix, Catalog number: 4444557

[0762] Peptide treatment:

1. Remove medium from cell flask by aspiration, trypsinize (0.05% Trypsin) and allow cells to dissociate from the flask bottom.

2. Neutralize trypsin using cell culture medium, count cells to estimate density and re-suspend to a final

density of 7.5 × 104 cells/mL in 4% FBS containing cell culture medium.

3. Plate 2 mL of cells (150,000 cells) into a well of a six-well plate.

4. Allow the cells to attach and recover for overnight at 37 °C, 5% CO_2.

5. 24 hours after seeding cells treat with corresponding amounts of peptide normalizing the DMSO background concentrations to .2%.

6. 48 hours after treatment remove medium from treated cells by aspiration, trypsinize (0.05% Trypsin) and allow cells to dissociate from the plate bottom.

7. Neutralize trypsin using cell culture medium, count cells to estimate density and re-suspend in cold PBS.

8. Spin cells down and remove PBS to move forward with RNA extraction.

[0763] RNA Extraction:

RNA Extraction was carried out using the Qiagen RNeasy Mini Kit and the protocol provided.

1. Disrupt cells Disrupt the cells by adding Buffer RLT.
2. Add 1 volume of 70% ethanol to the homogenized lysate, and mix well by pipetting.
3. Transfer up to 700 uL of the sample, including any precipitate that may have formed, to an RNeasy spin column placed in a 2 mL collection tube (supplied). Close the lid gently, and centrifuge for 15 s at ≥8000 x g (≥10,000 rpm).
4. Add 700 uL Buffer RW1 to the RNeasy spin column. Close the lid gently, and centrifuge for 15 s at ≥8000 x g (≥10,000 rpm).
5. Add 500 uL Buffer RPE to the RNeasy spin column. Close the lid gently, and centrifuge for 15 s at ≥8000 x g (≥10,000 rpm) to wash the spin column membrane.
6. Add 500 uL Buffer RPE to the RNeasy spin column. Close the lid gently, and centrifuge for 2 min at ≥8000 x g (≥10,000 rpm).
7. Place the RNeasy spin column in a new 1.5 mL collection tube (supplied). Add 30–50 uL RNAse-free water directly to the spin column membrane. Close the lid gently, and centrifuge for 1 min at ≥8000 x g (≥10,000 rpm) to elute the RNA.

[0764] cDNA Synthesis:

cDNA synthesis was carried out using the High-Capacity cDNA Reverse Transcription Kit and the protocol provided.

1. Pipette 10 uL of 2X RT master mix into each well of a 96-well reaction plate or individual tube.

2 Pipette 10 uL of RNA sample into each well, pipette up and down two times to mix.

3. Seal the plates or tubes.

4. Briefly centrifuge the plate or tubes to spin down the contents and to eliminate any air bubbles.

5. Place the plate or tubes on ice until you are ready to load the thermal cycler.

Thermo Cycling Conditions:

1. Temp: 25 °C Time: 10 min
2. Temp: 37 °C Time: 120 min
3. Temp: 85 °C Time: 5 min

[0765] Quantitative Real Time PCR:

1. Samples were prepared using Applied Biosystems TaqMan Fast Advanced Master Mix and the protocol provided.
2. Combine 2X Master Mix and 20X TaqMan Assay with water to bring volume to 18 uL. Transfer the appropriate volume of PCR reaction mix to each well of an optical reaction plate. Each well of reaction will received 1 uL of cDNA.
3. Seal the reaction plate with optical adhesive film then centrifuge briefly to bring the PCR reaction mix to the bottom of the well and eliminate air bubbles.
4. Apply a compression pad to the plate, if required by your real-time PCR system.

Real-time PCR Cycling Conditions:

1. Temp 50 °C Time: 2 min
2. Temp 95 °C Time: 2 min
3. Temp 95 °C Time: 1 second
4. Temp 60 °C Time: 20 seconds

[0766] Gene Expression Analysis:

Relative qPCR was used calculate the relative expression level of the target gene as compared to ACTIN B their expression is relativized ROX according to the following formula: Relative gene expression = $2^{-\Delta\Delta Ct}$ where $\Delta\Delta Ct = \Delta Ct$ (sample) $- \Delta Ct$ (DMSO control); and ΔCt = target gene Ct − reference gene (Actin B).

[0767] The present disclosure further demonstrates that provided technologies can modulate beta-catenin regulated expression without significantly impact beta-catenin-independent expression, e.g., beta-catenin-independent WNT target gene expression. Certain data were presented in Figure 2.

[0768] Activities of provided technologies were also confirmed in TCF reporter assay as described below. Those skilled in the art will appreciate that other suitable reagents may be utilized and various parameters may be adjusted.

[0769] DLD1 reporter cell line was generated by using TCF/LEF luciferase Reporter Lentivirus (BPS Bioscience Catalog#79787). Parental DLD1 cells (ATCC® CCL-221) were transfected with the lentivirus and followed by 3-day puromycin selection. Single clone was selected for Reporter assay.

[0770] On Day 1, cultured cells in flasks that are no more than about 60-70% confluent were washed with PBS and typsinized in 3mL/T75 until cells were free floating. Spin down cells for 5 minutes at

1100RPM. While cells spin, determine the number of plates (3 compounds per plate) needed. After spinning, aspirate the supernatant gently and add 10mL media (RPMI +4%FBS), and re-suspend and mix the cells gently. Count the cells twice in the cell counter Countess and take average of both the counts, and determine how many cells are needed. After plating cells at 5000 cells/well, seal with aerseal film. 90 uL cells/well. Incubate at 37 °C overnight, tap gently to mix and don't stack plates.

[0771] On Day 2, compounds were added. Stock solution was 10 mM. Make the DMSO containing media by adding 36 uL DMSO to 10 mL of media. Make the dilution wells by transferring 100 uL DMSO+Media into rows B-F of a protein LoBind 96-well plate. Row G is empty. Add any extra DMSO+media to row H. Transfer 4 uL of stock solution to Row A. One compound per column. Add 196 uL media to Row A, no DMSO in the media. Concentration of Row A was 200 uM. Mix well and do a 6 pt, 1:2 serial dilution, mix x10 per transfer and change tips before each transfer. Removed excess volume from final well (row F) and discard. Transfer 10 uL of the compound containing media to cells with a multichannel according to plate maps. Add 10uL DMSO containing media to the DMSO wells. The edge wells were typically not used in the assay and could be ignored if needed or replaced with PBS, but there typically were liquids in the wells. Cover plates with breathable plate sealer and incubate overnight.

[0772] A dilution chart is presented below as an example:

Starting Concentration (uM)	10000	
Media+compound Transfer onto cells (uL)	10	
Total Volume needed/compound, no extra (uL)	60	<-- BrightGlo(x3)+CTG(x3)
High Concentration Stock (uM)	200	
100% DMSO to add to 10mL media (uL)	36	
Final Volume (in cell plate)	100	
Volume compound in DMSO (uM)	4	
Volume Media Added on top (uL)	196	
Volume DMSO+ media in wells (uL)	100	<--Assumes 1:2 dillution
Volume media to Xfer (uL)	100	<--Assumes 1:2 dillution
Final DMSO concentration (%)	0.18	

[0773] A 96-well plate may be utilized to prepare dilution series for up to 12 compounds, each with several concentrations (e.g., 200, 100, 50, 25, 12.5, 6.25 and 0 uM; can be utilized as 100X depending on final test concentrations).

[0774] Useful plate maps of cell plates with samples added as examples. 0 uM is the DMSO control for the whole plate. Edge well filled with 90uL cells+ 10uL DMSO containing media.

Concen		1	2	3	4	5	6	7	8	9	10	11	12

-tration (uM)	A	DMSO					
20	B	DMSO	Compound #1	DMSO	Compound #2	Compound #3	DMSO
10	C						
5	D						
2.5	E						
1.25	F						
0.625	G						
	H	DMSO					

[0775] On Day 3, luciferase levels were assessed using Bright-Glo (Promega). Equilibrate Bright-Glo to room temperature before addition. 7 mL of mixed Bright-Glo per plate. Unused Bright-Glo could be store at -80 °C. Reconstituted reagent can be stored for up to 1 month at -80 °C, or after one freeze-thaw. When ready to read, remove plates from incubator and let sit at room temperature for 15 minutes. Typically stagger taking out plates if reading multiple plates before adding the Bright-Glo. Add 90 uL/well Bright-Glo and shake gently for 3 minutes. Read luminescence on GloMax immediately using 'BrightGlo' programs.

[0776] Cellular activity was assessed using CTG. Equilibrate CTG reagents to room temperature. Equilibrate plates to room temp, e.g. 15min. Use same time length for all plates. Add CTG reagent, 25 uL if using undiluted, or 90 uL if diluted 1 to 4. Shake for 2 min to induce cell lysis. Allow plate to to incubate at RT for 10 min to stabilize luminesent signal. Read luminesence using program 'CellTiter-Glo'. Use Prism to find the Absolute IC50 (AbsIC50=X[50]) of each compound.

[0777] Certain results are presented below as examples:

Plate 1 - DLD1 TCF c2 BrightGlo

% Inhibition

DMSO ave	45325								
I-762			DMSO	I-1001			I-988		
75.7	81.9	78.7	1.1	-1.2	7.5	3.5	78.1	81.3	81.9
56.8	70.2	65.6	-2.2	-3.6	-4.8	-7.4	61.5	72.0	76.2
28.2	45.2	44.6	-3.2	-6.7	-6.7	-0.7	32.0	57.8	62.0
12.9	17.4	11.9	-3.4	-8.0	-7.6	-5.0	13.3	28.8	33.4
12.9	16.9	5.5	1.9	-7.0	-2.8	6.1	5.7	22.3	21.2
14.5	18.6	9.3	5.9	-1.5	9.3	4.5	11.0	10.7	15.5

Plate 2 - DLD1 TCF c2 BrightGlo

% Inhibition

DMSO ave	4.52E+04								
I-999			DMSO	I-1000			I-927		
63.2	71.4	68.9	5.6	79.5	79.5	79.7	77.1	77.4	80.3
42.0	49.2	49.7	-1.6	57.0	59.8	61.4	68.0	70.2	72.9
18.2	32.5	23.9	-0.7	25.7	29.9	32.3	53.1	55.2	60.1
14.3	11.9	4.4	-5.7	5.5	10.2	12.4	23.9	33.7	42.0
1.7	8.0	4.0	1.6	-0.6	-1.2	1.5	8.7	15.1	18.6
7.7	8.8	6.4	0.8	-3.4	2.4	4.9	3.5	8.0	14.3

Plate 3 - DLD1 TCF c2 BrightGlo

% inhibition

DMSO ave	5.03E+04								
I-1050			DMSO	I-1051			I-1079		
61.5	59.8	58.7	8.4	20.2	21.7	24.7	55.6	58.1	54.7
50.8	46.4	39.4	1.4	3.9	5.0	-0.5	34.2	39.4	42.0
25.4	24.7	12.9	-2.2	-4.1	-5.0	-11.4	7.4	16.0	26.5
6.2	1.9	-2.2	-3.6	-12.5	-11.1	-13.2	-25.7	-0.8	5.1
6.8	-0.9	-4.5	-0.8	-12.2	-5.2	-3.8	1.4	-0.6	2.6
13.7	5.5	6.1	-3.2	-1.7	-3.4	0.0	1.4	6.9	6.8

Plate 4 - DLD1 TCF c2 BrightGlo

The 'empty' wells along the edges of the plates was either 200uL PBS (DLD1 TCF Neg) or cells treated with DMSO only (DLD1 TCF c2)

% Inhibition

DMSO ave	4.84E+04								
I-1080			DMSO	I-1081			I-1082		
51.4	56.9	51.8	4.7	67.2	69.3	72.3	76.5	77.1	79.9
42.4	42.2	38.1	-1.7	45.6	49.8	55.3	63.9	71.0	75.0
24.9	31.0	24.4	-2.9	17.5	23.8	31.0	38.5	56.2	62.0
14.6	19.8	7.9	-1.0	4.5	7.9	15.2	17.3	36.1	37.9
16.0	13.8	12.3	-5.8	0.8	2.4	5.4	14.0	21.5	24.0
20.2	13.7	15.3	6.8	9.2	7.1	11.5	14.1	17.4	20.3

[0778] Certain results were presented in Fig. 3.

[0779] Table E2. Certain data of various peptide compositions.

Structural information are described in Table E3. Compositions of stapled peptides.

1. ID (may include batch number (e.g., -1)

2: FP EC50 (nM)

3: CHI LogD

4: Solubility (uM)

5: NanoBRET %inh @ 10 uM

6: NanoBRET IC50 (uM)

7: NanoBRET Abs IC50 (uM)

8: DLD1 reporter assay Abs IC50 (uM)

9: alphascreen EC50 (nM)

1	2	3	4	5	6	7	8	9
I-1		1.274						10000
I-2		1.246						10000
I-3		1.307						9132
I-4		1.353						5892
I-5		1.331						10000
I-6		1.378						6501
I-7		1.316						10000
I-8		1.349						10000
I-9		1.654						10000
I-10		1.661						10000
I-11		2.272						10000
I-12		2.247						10000
I-13		2.013						10000
I-14		2.013						9756
I-15		2.21						10000
I-16		2.21						10000
I-17		2.097						10000
I-18		2.108						10000
I-19		0.948						10000
I-20		0.935						10000
I-21		0.92						10000
I-22		0.911						10000
I-23		0.942						9219
I-24		0.977						8565.5
I-25		1.174						7224
I-26		1.248						8106.5
I-27		1.145						6824
I-28		1.219						8459.5
I-29		1.596						10000

I-30		1.228						8818.5
I-31		1.245						7221.667
I-32		1.243						7351
I-33		1.228						9978.5
I-34		1.323						10000
I-35		1.334						9543.5
I-36		1.13						8269.5
I-37		1.161						10000
I-38		1.21						10000
I-39		1.259						10000
I-40		1.243						10000
I-41		1.088						10000
I-42		1.09						9337
I-43		1.314						10000
I-44		1.312						10000
I-45		1.205						10000
I-46		1.205						10000
I-47		1.279						10000
I-48		1.37						10000
I-49		1.176						10000
I-50		1.201						10000
I-51		1.254						10000
I-52	3195	1.934	50					158
I-53	5000	1.307						1142
I-54	3187	1.469						482
I-55	5000	1.351						2384
I-56		2.164						10000
I-57		2.152						10000
I-58		1.495						10000
I-59		1.531						9876
I-60		1.365						10000
I-61		1.446						8905
I-62		0.981						10000
I-63		1.019						10000
I-64	4246	1.222						650
I-65		1.274						2077
I-66	1090	1.259						174.5
I-67	1227	1.24	50					154.5
I-68		1.553						8120
I-69		1.593						9096
I-70		1.609						10000

I-71		1.686						10000
I-72		1.721						10000
I-73		1.723						10000
I-74		1.329						10000
I-75		1.376						10000
I-76		1.198						10000
I-77		1.285						10000
I-78	5000	1.242						7478
I-79		1.274						3970
I-80		1.045						10000
I-81		1.063						9775
I-82		1.003						10000
I-83		1.032						10000
I-84		0.985						10000
I-85		0.998						10000
I-86		1.237						10000
I-87		1.152						10000
I-88		1.239						10000
I-89		0.967						5640
I-90		0.958						10000
I-91		1.13						4720
I-92		1.199						9155
I-93		1.321						10000
I-94		1.409						7009
I-95		1.308	33					8658
I-96		1.343						10000
I-97		2.062						7006.333
I-98		2.078						10000
I-99		1.993						10000
I-100		1.993						9234
I-101		1.334						10000
I-102		1.274						10000
I-103		1.268						4945
I-104		1.333						6165
I-105		1.027						10000
I-106		1.038						10000
I-107		1.005						10000
I-108		1.145						10000
I-109		1.223						8818
I-110		0.769						8500
I-111		0.779						7637

I-112		1.401						10000
I-113		1.435						6202
I-114		2.111						4740
I-115		2.145						4775
I-116		2.134	11					3639
I-117		1.328						10000
I-118		1.545						4363
I-119		1.17						4943
I-120		1.243						4553
I-121		0.825						4462
I-122		0.84						10000
I-123	2112	1.978						444
I-124		2.252						1283
I-125	3059	2.256						569
I-126		2.239						1478
I-127	4841	2.245						552
I-128		2.223						907
I-129	1981	2.108						83
I-130		1.346						797
I-131	2160	1.496						400
I-132	5000	1.692	49					5094
I-133	5000	2.383						495
I-134	2696	2.426						99
I-135	1867	2.178						278.5
I-136		2.136						3296
I-137		2.174						1410
I-138		1.815						10000
I-139		2.834						10000
I-140	2269	2.194	48					934
I-141		2.428						5448
I-142		2.183						7367
I-143	2272	2.071						733
I-144	146.5	2.12						66
I-145		2.283						10000
I-146		2.004						1224
I-147	1637	1.399						328
I-148	2772	1.357						398
I-149		1.27						1789
I-150		1.297						1940
I-151		1.355						5502
I-152	5000	1.337						752

I-153	2135	1.317						153
I-154	5000	1.426						828
I-155	5000	1.415						734
I-156		1.066						4177
I-157		1.202						4059
I-158		1.23						2170
I-159		1.452						5353
I-160		1.49						3238
I-161		0.816						10000
I-162		0.827						10000
I-163		1.29						9752
I-164		1.359						3613
I-165		1.998						1233
I-166	2164	2.06						86.5
I-167		1.927						6200
I-168		1.942						5641
I-169		2.18						9214
I-170		2.138						4669
I-171		2.204						2066
I-172	5000	2.173	50					324
I-173	3116	3.076	26					105
I-174	1760	2.242						116
I-175	1760	2.242						116
I-176	1992	2.58						549
I-177	1992	2.58						549
I-178	1633	1.913						152
I-179	1633	1.913						152
I-180	561	2.193						88
I-181	310	2.213						51
I-182	2800	2.07						750
I-183		2.213						3766
I-184	3109	2.265						628
I-185		2.303						2661
I-186	5000	2.041						518
I-187	3318	2.083						204
I-188	1597	1.611						156
I-189	1597	1.611						156
I-190	696	1.736						94
I-191	1656	2.412						240
I-192	1656	2.412						240
I-193	533	2.462						76

I-194	1008	2.327						105
I-195		2.983						2177
I-196		3.711						5513
I-197		3.809						6145
I-198	5000	2.368						538
I-199	5000	2.262						796
I-200	5000	2.278						173
I-201		2.938						6161
I-202		2.623						7883
I-203		3.091						5991
I-204		2.985						7284
I-205		3.843						10000
I-206		2.41						2139
I-207	1745	2.054						143
I-208	1745	2.054						143
I-209		2.088						1404
I-210		2.088						1404
I-211	5000	2.101						367
I-212	5000	2.101						367
I-213		2.822						8046
I-214		2.703						7207
I-215		2.867						10000
I-216		2.867						10000
I-217	1957	2.012						90
I-218	1957	2.012						90
I-219	2855	2.074						131
I-220	2855	2.074						131
I-221		1.34						6584
I-222		1.34						6584
I-223		1.401						4117
I-224		1.401						4117
I-225		1.497						7631
I-226		1.497						7631
I-227		1.534	38					5912
I-228		1.534	38					5912
I-229		3.044						5813
I-230		2.983						4613
I-231		3.025						6525
I-232		3.037						7644
I-233		2.818						5896
I-234		3.034						7529

I-235		3.204						7343
I-236	5000	2.067						384
I-237	5000	2.067						384
I-238	1592	2.074						267
I-239	1592	2.074						267
I-240		2.074						3468
I-241		2.074						3468
I-242		2.098						4905
I-243		2.098						4905
I-244		3.101						2960
I-245		3.101						2960
I-246		3.01						3966
I-247		3.01						3966
I-248		2.263						2830
I-249		2.263						2830
I-250	5000	2.299						1203
I-251	5000	2.299						1203
I-252		2.214						3690
I-253		2.214						3690
I-254	5000	2.232						1962
I-255	5000	2.232						1962
I-256		3.095	10					9207
I-257		2.913	10					3811
I-258		2.886						2925
I-259		2.902						4178
I-260	5000	2.065						683
I-261	5000	2.014						347
I-262	5000	2.106						967
I-263	5000	2.128						864
I-264	5000	2.011						364
I-265	3762	2.032	36					194
I-266	5000	2.016						318
I-267	5000	2.047	37					620
I-268		2.079	47					3999
I-269		1.814						5311
I-270	5000	2.496						835
I-271	5000	2.444	10					788
I-272		2.458						1011
I-273		2.738	10					1890
I-274		2.619	10					2349
I-275	5000	2.191	44					859

I-276	3428	2.207						329
I-277		2.186	45					6797
I-278		2.209						2231
I-279		1.973						4957
I-280		1.991						3054
I-281		2.2						6259
I-282		2.224						3528
I-283		1.294						9543
I-284		1.525	40					4348
I-285	5000	1.491						246
I-286	4482	2.014						450
I-287	4954	1.875						534
I-288	1313	1.926	32					74
I-289	5000	2.242						626
I-290	3286.5	2.271						303
I-291	3129	2.195						327
I-292	1871	2.208						187
I-293	139.5	2.382						41
I-294	130	1.996						40
I-295	5000	2.662						1177
I-296		2.939						1906
I-297		3.294						5809
I-298		2.781						3858
I-299	1303	2.001						189
I-300		2.817						
I-301		3.262						
I-302		2.38						
I-303		3.131						
I-304	5000	2.339						
I-305	3982.5	2.348	10					
I-306	5000	2.03						
I-307	4196	2.055						
I-308	5000	2.03						
I-309	3118	2.05						181
I-310		2.188						3243
I-311		2.226						1238
I-312		2.134						10000
I-313		2.159						3600
I-314		2.344						10000
I-315		2.359						9897
I-316	3982	1.906						136

I-317	5000	2.016						443
I-318	4633	2.001						121
I-319	1419	2.019						54
I-320		2.041						10000
I-321		2.073						2242
I-322	5000	1.933						355
I-323	3471	1.953						92
I-324		2.596						1745
I-325	1310	1.976						53
I-326	1752	1.97	34					
I-327	4724	1.958	43					
I-328	1914	1.983	44					
I-329	5000	2.01	41					
I-330	5000	2.047	21					
I-331	5000	2.024	41					
I-332	5000	2.038	40					
I-333	2756	2.12						
I-334	5000	1.863						
I-335	1544	1.928						
I-336	153	1.737	48					
I-337	5000	1.579	48					
I-338	5000	1.586	47					
I-339	5000	1.328	50					
I-340	5000	1.341	49					
I-341	2000	1.732	38					
I-342	58.5	2.074	50					
I-343	172	1.931	50					
I-344	42	1.977	44					
I-345	134	2.144	49					
I-346	180	1.943	44					
I-347	121.5	1.956	50					
I-348	5000	2.397	46					10000
I-349	5000	2.415	49					7193
I-350	5000	2.887	48					10000
I-351	5000	2.944	50					10000
I-352	5000	2.512	10					377
I-353	5000	1.916	45					9291
I-354	5000	1.947	50					2126
I-355	5000	1.606	49					10000
I-356	5000	1.619	50					8201
I-357	5000	1.852	46	-5.3				10000

I-358	5000	1.882	50					10000
I-359	5000	2.055	30					
I-360	145.5	2.017	44					
I-361	42	2.058	46					
I-362	3656	1.443	47					
I-363	5000	2.09	32					
I-364	5000	2.137	26					
I-365	2715	2.038	48					
I-366	1445	2.084						
I-367	177	2.154						
I-368	5000	2.168						
I-369	2311	1.661	40					
I-370	1563	2.176	47					
I-371	1389	2.136	48					
I-372	2093	2.174	44					
I-373	945	2.298	26					
I-374	3011	2.242	49					
I-375	3011	2.242	49					
I-376	1321	2.296	48					
I-377	1321	2.296	48					
I-378	1336	2.143	50					
I-379	1336	2.143	50					
I-380	552	2.19	49					
I-381	3653	2.636	10					
I-382	2064	2.631	10					
I-383	5000	1.859	36					
I-384	177	1.837	45					
I-385	3150	1.713	50					
I-386	5000	2.14	47					
I-387	2621	2.136	48					
I-388	5000	2.863	10					
I-389	5000	2.868	17					
I-390	3422	2.587	10					
I-391	1913	2.585	10					
I-392	5000	2.518	10					
I-393	1953	2.641	10					
I-394	5000	3.86						
I-395	5000	4.073						
I-396	3427	2.819						
I-397	2229	2.828						
I-398	2155	1.846	46					

I-399	2499	2.516						
I-400	3587	1.919						
I-401	134	2.281						
I-402	5000	3.393						
I-403	2128	2.865						
I-404	1851	2.396						
I-405	3821	1.723						
I-406	94	2.038	28					
I-407	30	2.394	50	55.1				
I-408	120	2.674	50					
I-409	70	2.741	48					
I-410	50	2.26	50					
I-411	189	2.567	50					
I-412	92	2.651						
I-413	90	2	31					
I-414	3417	2.096	19					
I-415	2201	2.125	45					
I-416	5000	2.058	44					
I-417	5000	2.085	30					
I-418	149	2.089	32					
I-419	23	2.114						
I-420	127.5	2.157	24					
I-421	99	2.087	36					
I-422	27	2.136	24					
I-423	105	2.089	48					
I-424	170	1.968	50					
I-425	50	2.01	45					
I-426	109	1.959	33					
I-427	38.5	1.985	50					
I-428	60	1.987	14					
I-429	146	2.069	50					
I-430	154	2.133						
I-431	1320	2.225	33					
I-432	145	2.234	23					
I-433	136	2.078	39					
I-434	67.5	2.049	20					
I-435	70	2.133	50					
I-436	56	2.159	50					
I-437	26	2.001	44					
I-438	5000	1.39	46					
I-439	5000	1.408	50					

I-440	5000	1.613	50					
I-441	133	2.005	38					
I-442	4484	2.098	40					
I-443	2126	2.128	50					
I-444	80	1.987	50					
I-445	4962	2.054	43					
I-446	130	1.97	44					
I-447	74	1.996	50					
I-448	92	1.976	50					
I-449	53	1.998	30					
I-450	3717	1.875	50					
I-451	5000	1.88	50					
I-452	1656	1.917	50					
I-453	1554	2.007						
I-454	125	2.0462						
I-455	83.5	2.0374						
I-456	2168	2.0045						
I-457	1435	2.0242						
I-458	101.5	2.0703						
I-459	183	2.0572						
I-460	195.5	1.9935						
I-461	125	1.9364						
I-462	28	1.757	49					
I-463	92	1.785						
I-464	57	1.831						
I-465	81	2.023	40					
I-466	19	2.069	50					
I-467	44	2.255	50					
I-468	27	2.292	41					
I-469	27	2.354						
I-470	11	2.394		14.1				
I-471	52	2.429	13					
I-472	62	2.416	36					
I-473	121	2.076	39					
I-474	43	2.114	50					
I-475	102	2.277	43					
I-476	48	2.317	49					
I-477	119	2.005	49					
I-478	71	2.052	42					
I-479	27	2.094	38					
I-480	176	2.096	36					

I-481	42	2.133	30					
I-482	118	2.485						
I-483	5000	1.845	43					
I-484	5000	1.863	45					
I-485	34	2.297	50					
I-486	147	1.97	50					
I-487	45	1.99	44					
I-488	43	2.396	30					
I-489	57	2.337	36					
I-490	88	2.211	50					
I-491	153	2.023	39					
I-492	53	2.052	49					
I-493	88	2.197	50					
I-494	82	2.052	44					
I-495	181	2.354						
I-496	5000	2.456	41					
I-497	5000	2.6	29					
I-498	5000	2.637	42					
I-499	123	2.167	48					
I-500	176	2.626	28					
I-501	94	2.138	49					
I-502	55	2.171	50					
I-503	84	2.094	33					
I-504	65	2.222	18					
I-505	23	2.259	50		5.6	4.9	10.8	
I-506	25	2.412	10					
I-507	192	2.079	47					
I-508	73	2.126	50					
I-509	99	2.163	41					
I-510	128	2.057	43					
I-511	40	2.099	29					
I-512	20	2.437	17					
I-513	143	1.569	50					
I-514	30	1.911	50					
I-515	54	2.028	46					
I-516	23	2.072	42					
I-517	15	2.421	15					
I-518	143	1.966	39					
I-519	33	2.004	50					
I-520	45	2.313	50					
I-521	23	2.351	50					

I-522	75	2.214	50					
I-523	44	2.241	50					
I-524	2550	1.889	50					
I-525	196	2.019						
I-526	56	2.049						
I-527	98	2.376						
I-528	63	2.395						
I-529	5000	2.854	50					
I-530	5000	2.935	50					
I-531	5000	2.794	43					
I-532	5000	2.858	42					
I-533	155	2.289	44					
I-534	5000	2.432	31					
I-535	5000	2.858	47					
I-536	4469	2.746	23					
I-537	5000	2.871	11					
I-538	5000	2.753	33					
I-539	5000	2.944	10					
I-540	5000							
I-541	180	2.087	50					
I-542	109	2.135	39					
I-543	32	2.474	28					
I-544	24	2.478	48					
I-545	21	2.574	46					
I-546	16	2.4	50					
I-547	43	2.45						
I-548	17	2.528	50					
I-549	71	2.291						
I-550	30	2.343	50					
I-551	45	2.278	50					
I-552	15.5	2.334						
I-553	61	2.398						
I-554	27.5	2.457	35					
I-555	41	2.374	41					
I-556	20	2.435	39					
I-557	35	2.391	47					
I-558	56	2.308						
I-559	43	2.341						
I-560	81	2.391						
I-561	34	2.437	14					
I-562	51	2.269						

I-563	19	2.317	50					
I-564	36	2.374	47					
I-565	13	2.435	26					
I-566	76	2.175						
I-567	37	2.243	50	8.9				
I-568	73	2.158						
I-569	42	2.169	49					
I-570	56	2.219						
I-571	32	2.245	24					
I-572	73	2.064						
I-573	36	2.116	49					
I-574	36	2.16	48					
I-575	21	2.21	46					
I-576	23	2.348	46					
I-577	13	2.376	47					
I-578	5000	2.257	50					
I-579	5000	1.506	45					
I-580	114	2.436	24					
I-581	112	2.458						
I-582	17.5	2.504	22					
I-583	69	2.563	-1					
I-584	33	2.635	21					
I-585	5000	2.364	50					
I-586	5000	2.39	50					
I-587	5000	2.145	50					
I-588	5000	2.873	49					
I-589	48	2.119						
I-590	45	2.152						
I-591	64	2.348						
I-592	24	2.414						
I-593	68	2.119						
I-594	87	2.611						
I-595	57	2.644						
I-596	112	2.373						
I-597	76	2.39						
I-598	845	2.244	49					
I-599	138	2.425	45					
I-600	796	2.694	47					
I-601	419	2.748	43					
I-602	3150	3.146	-1					
I-603	392	2.624	10					

I-604	692	2.609	10					
I-605	632	2.617	10					
I-606	289	2.412	49					
I-607	253	2.416	48					
I-608	211	2.506	40					
I-609	80	2.534	43					
I-610	54	2.587	49					
I-611	55	2.595	48					
I-612	64	2.414	49					
I-613	1627	2.781	10					
I-614	1143	2.801	10					
I-615	50	2.826	10					
I-616	108	2.413	10					
I-617	253	2.549	10					
I-618	135	2.617	10					
I-619	44	2.677	47					
I-620	35	2.688	48		5.8			
I-621	58	2.338	50					
I-622	230	2.453	45					
I-623	103	2.494	44					
I-624	273	2.598	27					
I-625	119	2.681	47					
I-626	5000	2.048	50					
I-627	338	3.002	47					
I-628	713	3.103	47					
I-629	685	3.109	40					
I-630	5000	4.36						
I-631	5000	4.365						
I-632	5000	3.155						
I-633	88	2.624	10					
I-634	425	2.764	49					
I-635	171	2.734	43					
I-636	198	2.569	50					
I-637	5000	2.554	50					
I-638	3876	2.622	48					
I-639	109	2.49	44					
I-640	87	2.516	50					
I-641	122	2.497	43					
I-642	118	2.512	48					
I-643	958	2.833	28					
I-644	808	2.837	22					

I-645	395	2.677	40					
I-646	461	2.694	41					
I-647	445	2.677	50					
I-648	233	2.721	46					
I-649	209	2.677	41					
I-650	137	2.718	45					
I-651	186	2.167	48					
I-652	72	2.233	48					
I-653	108	2.07	39					
I-654	20	2.121	47					
I-655	183	2.688	46					
I-656	73	2.736	40					
I-657	46	2.767	40					
I-658	546	2.859	48					
I-659	430	2.903	48					
I-660	544	2.754	45					
I-661	45	2.099	45					
I-662	26	2.125	46					
I-663	43	1.798	42					
I-664	996	2.433	45					
I-665	923	2.448	47					
I-666	626	2.862						
I-667	585	2.88						
I-668	675	2.199						
I-669	451	2.25						
I-670	5000	2.16						
I-671	3138	2.25						
I-672	5000	1.896						
I-673	5000	1.872						
I-674	5000	1.949						
I-675	4525	2.127						
I-676	5000	2.287						
I-677	22	2.449	49					
I-678	26	2.329	49					
I-679	7	2.382	48	44.8				
I-680	32	2.215	47					
I-681	12	2.273	48					
I-682	41	2.409	47					
I-683	19	2.44	37					
I-684	15	2.037	44					
I-685	25	2.1	44					

I-686	5	1.997	46	48.3	7.5	11.2, 8.5	5.6	
I-687	12	2.035	38					
I-688	6	1.924	46					
I-689	11	1.957	50					
I-690	7	2.013	44					
I-691	9	2.068	45					
I-692	9	2.12	38					
I-693	12	2.184	34					
I-694	5	2.073	40	32.7				
I-695	5	2.117						
I-696	5	1.997	40	17				
I-697	5	2.093	21					
I-698	5	2.153	43					
I-699	43	2.633	50					
I-700	49	2.607						
I-701	34	2.631	46					
I-702	76	2.747	40					
I-703	57	2.762	50			11.9		
I-704	49	2.745	42		7.9			
I-705	58	2.887	25					
I-706	57	2.987	48					
I-707	46	2.963	48					
I-708	52	2.976	47		11.5			
I-709	54	3.114	10					
I-710	73	2.143	45					
I-711	88	2.132	48					
I-712	92	2.778	42					
I-713	70	2.851	48					
I-714	131	2.698	43					
I-715	60.5	2.762	25					
I-716	91	2.622	50					
I-717	39	2.694	35					
I-718	82	2.765	38					
I-719	38	2.818	28					
I-720	75	2.665	33					
I-721	46	2.722	28					
I-722	1128	2.518	27					
I-723	3833	2.583	29					
I-724	114	2.42	34					
I-725	5000	2.609	42					
I-726	5000	2.338	43					

I-727	5000	2.414	26					
I-728	289	2.354	38					
I-729	56	2.366						
I-730	35	2.377	44					
I-731	34	2.335	48					
I-732	4219	2.121						
I-733	4261	2.154	43					
I-734	370	2.713						
I-735	246	2.738	43					
I-736	440	2.722						
I-737	353	2.729	44					
I-738	63	2.455	41					
I-739	53	2.406	10					
I-740	376	2.822						
I-741	226	2.915	10					
I-742	159	2.804	27					
I-743	85	2.604	29					
I-744	112	2.557						
I-745	80	2.61	10					
I-746	5000	2.372						
I-747	2388	2.492	15					
I-748	54	2.459						
I-749	40	2.472	45					
I-750	43	2.441	48					
I-751	29	2.513	48					
I-752	16	2.419		53		9.9		
I-753	14	2.432	50			10.0		
I-754	115	2.666						
I-755	88	2.684	47					
I-756	56	2.606	49					
I-757	64	2.546						
I-758	47	2.571	47					
I-759	1534	2.582						
I-760	608	2.66	-1					
I-761	5	2.207	42	63.4	5.0			
I-762	6	2.247	45			10.0	6.0	
I-763	5	1.967						
I-764	14	2.212	45					
I-765	228	1.71	49					
I-766	55	1.853	50					
I-767	12	2.004	50					

I-768	9	2.043						
I-769	5	2.307				13.0		
I-770	5	2.358				13.7		
I-771	5	2.031						
I-772	7	2.069						
I-773	167	1.76	47					
I-774	38	1.928	46					
I-775	7	2.092	47	5.1				
I-776	5	2.137	41					
I-777	5	2.155	50	24.5	14.4			
I-778	8	2.035	43					
I-779	5	2.124	44					
I-780	9	2.081	50		17.1			
I-781	5	2.163	41	24	11.6			
I-782	6	2.212	38					
I-783	7	2.19	48	50.9	7.5			
I-784	6	2.29	21	35.1	12.1			
I-785	6	2.278	42	31				
I-786	8	2.298	39		17.1			
I-787	5	2.077	50					
I-788	5	2.173	31					
I-789	19	2.082	50	9.7				
I-790	24	2.125	50					
I-791	310	2.054	48					
I-792	20	1.963	33					
I-793	14	2.387	10					
I-794	19	2.378	40					
I-795	176	2.387	10					
I-796	8143	2.447	35					
I-797	10000	2.321	45	4.3	>20			
I-798	106	2.068						
I-799	92	2.057		0.9				
I-800	79	1.997		8.1				
I-801	6	2.205	50		6.8			
I-802	6	2.301	10					
I-803	5	2.03	40		9.0			
I-804	5	2.112	44					
I-805	5	1.979	50					
I-806	5	2.039	37					
I-807	5	2.265	24		5.3		3.4	
I-808	5	2.343	10					

I-809	5	2.097	36		11.7			
I-810	6	2.165	39					
I-811	32	1.684	43					
I-812	33	1.897	47					
I-813	7	2.166	28					
I-814	7	2.096	47		12.7			
I-815	5	2.096	46		11.8			
I-816	5	2.052	46					
I-817	10	2.233	47	45	6.8			
I-818	6	2.117	48	31.4				
I-819	5	2.028	50	37.8				
I-820	6	2.095	38	30.8				
I-821	5	2.068	36					
I-822	6	2.026	46	53	7.7			
I-823	5	2.086	32	37.5	>10			
I-824	7	2.06	36					
I-825	15	2.028						
I-826	15	2.066	30					
I-827	13	2.1						
I-828	13	2.137	40					
I-829	15	2.084	34					
I-830	15	2.042						
I-831	11	2.075	50	32.4				
I-832	9	2.095						
I-833	8	2.146	50					
I-834	14	2.08						
I-835	11	2.109	50	27.6				
I-836	11	2.22	41			16.9		
I-837	5	2.298	14			23.8		
I-838	12	2.186	41			17.4		
I-839	7	2.265	13			41.9		
I-840	16	2.191	32			22.3		
I-841	12	2.258	14			34.4		
I-842	34	2.392	10			47.9		
I-843	154	2.489	10					
I-844	6	2.305	35		10.7			
I-845	7	2.417	10					
I-846	35	2.415	18	4.3				
I-847	28	2.511	10					
I-848	13	2.464				7.0		
I-849	7	2.393			2.3	2.6		

I-850	26	2.261				16.4		
I-851	16	2.147				7.6		
I-852	7	2.397				2.8		
I-853	8	2.515			6.6			
I-854	8	2.48			4.6	3.6		
I-855	22	2.535						
I-856	17	2.453						
I-857	15	2.581	10		50.6			
I-858	34	2.543	18					
I-859	36	2.711						
I-860	61	2.722	10					
I-861	40	2.548	20					
I-862	123	2.85	10					
I-863	22	2.284	10					
I-864	12	2.622	10		29.1			
I-865		1.62	38					
I-866			50					
I-867		1.802	13					
I-868		1.882	10					
I-869		1.912	10					
I-870	9.5	1.99	47					
I-871	5	1.917	45					
I-872	9.5	1.893	50					
I-873	6.5	1.995	47		8.9			
I-874	18.5	2.315	50					
I-875	26	2.208	-1					
I-876	24	2.257	50					
I-877	11	2.346	50					
I-878	6	2.093	46					
I-879	6	1.998	45					
I-880	6	1.722	42					
I-881	10	-0.008	-					
I-882	22	2.028	-		22.5			
I-883	53	2.397	42					
I-884	14	2.112	34					
I-885	32	2.39	43					
I-886	22	1.506	43					
I-887	14	1.373	46					
I-888	13	1.391	21					
I-889	16	1.486	41					
I-890	16	1.668	40					

I-891	13	1.526	42					
I-892	18	1.475	33					
I-893	834	1.759	-1					
I-894	15	1.451	-1					
I-895	14	1.448	31					
I-896	22	1.446	30					
I-897	16	1.653	43					
I-898	16	2.201	42					
I-899	28	2.263	40					
I-900	33	2.743	41					
I-901	38	2.492	40					
I-902	104	2.688	-1					
I-903	33	2.383	43					
I-904	54	2.646	30					
I-905	8	1.921	46					
I-906	8	1.75	46		>20			
I-907	9	1.802	20					
I-908	10	1.819	44					
I-909	8	1.926	44					
I-910	10	1.841	40					
I-911	12	1.822	-1					
I-912	10	1.826	45					
I-913	10	1.824	49					
I-914	16	1.819	46					
I-915	28	2.326	41					
I-916	28	2.328	45					
I-917	12	2.152	44					
I-918	33	2.494	44					
I-919	28	2.55	44					
I-920	117	3.076	50					
I-921	8	2.262	24		4.0			
I-922	12	2.344	32		2.3	2.7		
I-923	27	2.462	-			6.0		
I-924	7	2.277	-			3.3	4.5	
I-925	21	2.344	-					
I-926	43	2.406	-		17.1			
I-927	11	2.313	-			8.2	4.2	
I-928	21	2.38	-		5.0			
I-929	23	2.74	-		7.0			
I-930	37	2.962	-		5.6			
I-931	221	3.358	-					

I-932	35	2.769	-			11.4		
I-933	168	3.026	-		>20			
I-934	69	2.817	-					
I-935	8	1.928	-					
I-936	7	1.935	-					
I-937	9	1.937	-					
I-938	9	2.162	-					
I-939	8	1.786	15		18.0			
I-940	1742	2.055	45					
I-941	2111	2.011	46					
I-942	1285	1.984	46					
I-943	1994	2.071	49					
I-944	761	1.982	-1					
I-945	1079	2.104	-1					
I-946	798	2.209	47					
I-947	1053	2.271	47					
I-948	2433	2.013	47					
I-949	2256	2.086	49					
I-950	1634	1.9	46					
I-951	1471	1.971	47					
I-952	1214	1.975	-1					
I-953	1456	2.04	47					
I-954	900	1.918	46					
I-955	1198	1.998	45					
I-956	1086	1.875	46					
I-957	1426	-0.043	46					
I-958	606	1.417	47					
I-959	881	-0.036	48					
I-960	336	2.06	13					
I-961	357	2.123	10					
I-962	407	2.046	-1					
I-963	402	2.117	-1					
I-964	1435	1.802	46					
I-965	1780	1.903	45					
I-966	2023	1.791	43					
I-967	1735	1.884	45					
I-968	2981	1.752	30					
I-969	2318	1.851	46					
I-970	1364	1.853	-1					
I-971	1607	1.939	10					
I-972	1819	1.879	30					

I-973	1377	1.95	10					
I-974	1780	1.857	10					
I-975	1706	1.952	46					
I-976	399	1.78	50					
I-977	367	1.87	46					
I-978	112	1.745	-1					
I-979	240	1.809	-1					
I-980	221	1.695	19					
I-981	199	1.761	45					
I-982	190	1.853	16					
I-983	118	1.919	10					
I-984	179	1.8	45					
I-985	301	1.87	47					
I-986	136	1.855	27					
I-987	112	2.115	10					
I-988	5	2.345	11			13.9	5.2	
I-989	87	2.1	10					
I-990	41	2.647	10			8.8		
I-991	51	2.696	10					
I-992	59	2.561	12					
I-993	12	2.334	41			4.0	4.4	
I-994	121	3.205	10					
I-995	55	2.799	34					
I-996	21	2.839	48			11.3	10.8	
I-997	154	3.415	10					
I-998	127	2.87	43					
I-999	26	2.941	30			26.3	11.1	
I-1000	18	2.967	44			23.9	8.0	
I-1001	5526	1.886	-1			>>20	>>20	
I-1002	9	2.605	-1			29.8	>>20	
I-1003	38	2.543	10					
I-1004	5	1.996	47			10.6	>20	
I-1005	42	2.641	10					
I-1006	5	1.703	30			>20		
I-1007	6	2.449	18			24.9	3.3	
I-1008	9	2.431	34			14.0	13.0	
I-1009	11	2.038	-1			33.3		
I-1010	8	2.356	-1			13.3		
I-1011	5	2.034	23			20.8	>20	
I-1012	60	2.61	10					
I-1013	8	2.133	47					

I-1014	19	2.38	10					
I-1015	5	2.27	47			8.9	9.0	
I-1016	8	2.38	10			21.4	21.4	
I-1017	5	2.113	48			8.9	>20	
I-1018	26	2.347	10					
I-1019	5	2.219	48			9.6	8.3	
I-1020	52	2.488	10					
I-1021	5	2.049	44			11.5		
I-1022	33	2.285	20					
I-1023	10	2.175	46					
I-1024	43	2.449	14					
I-1025	5					23.6	>20	
I-1026	5					16.7	>20	
I-1027	1140							
I-1028	13	2.402	10			8.7	6.4	
I-1029	823	2.36	49			>20	>20	
I-1030	507	2.757	47			>20	>20	
I-1031	11	2.42	47			8.8		
I-1032	15	2.431	44					
I-1033	10	2.504	34					
I-1034	27	2.709	12			9.5	11.9	
I-1035	21	2.629	28			10.2	>20	
I-1036	29	2.46	-1					
I-1037	30	2.521	-1					
I-1038	101	2.729	10					
I-1039	57	2.654	20					
I-1040	8	2.268	50			9.3		
I-1041	8	2.084	50			>>20		
I-1042	5	2.354	46					
I-1043	12	2.148	43					
I-1044	5	2.318	43			17.6	20.0	
I-1045	5	2.117	49			23.9		
I-1046	5	2.398	37			20.5		
I-1047	5	2.193	10			28.4		
I-1048	5	2.517	42			8.8	10.5	
I-1049	6	2.285	48					
I-1050	5	2.446	43			24.8	11.2	
I-1051	14	2.228	48			>>20	>>20	
I-1052	9	2.334	33					
I-1053	11	2.381	48			>20		
I-1054	5	2.186	46			>20		

I-1055	7	2.113	10					
I-1056	6494	1.929	41					
I-1057	6641	1.92	50					
I-1058	14	2.249	42					
I-1059	42	2.444	42					
I-1060	38	2.602	10					
I-1061	6	2.562	10			10.3		
I-1062	393	1.898	-1					
I-1063	471	1.644	43					
I-1064	414	1.967	29					
I-1065	520	2.044	-1					
I-1066	789	2.024	10					
I-1067	517	2.147	-1					
I-1068	950	2.053	13					
I-1069	920	2.113	10					
I-1070	1022	2.135	10					
I-1071	1261	2.218	33					
I-1072	723	1.389	35					
I-1073	409	1.831	31					
I-1074	498	1.92	34					
I-1075	567	1.971	17					
I-1076	448	2.049	-1					
I-1077	324	2.06	10					
I-1078	352	2.162	27					
I-1079	5	2.498	45			19.7	14.5	
I-1080	6	2.593	47			>20	17.2	
I-1081	5	2.398	43			16.7	10.0	
I-1082	5	2.331	48			14.1	4.8	
I-1083	8					18.8		
I-1084	368							
I-1085	390	3.702	10					
I-1086	12	2.709	-1					
I-1087	9	2.766	44			9.3	>20	
I-1088	22	2.8	44					
I-1089	12	2.826	43					
I-1090	18	2.982	39					
I-1091	27	3.042	33					
I-1092	26	3.173	28					
I-1093	43	3.22	48					
I-1094	46	3.271	-1					
I-1095	15	3.089	-1			>20	>20	

I-1096	17	3.18	10					
I-1097	40	3.611	20			>20	>20	
I-1098	100	3.538	10					
I-1099	9	2.16	47			9.0		
I-1100	16	2.357	46					
I-1101	14	2.216	48					
I-1102	16	2.394	10					
I-1103	15	2.18	46					
I-1104	10	2.383	48					
I-1105	36	2.328	48			>20		
I-1106	23	2.439	47			>20		
I-1107	18	2.637	10					
I-1108	18	2.288	42					
I-1109	24	2.308	45					
I-1110	38	2.37	10					
I-1111	28	2.357	10					
I-1112	40	2.719	10					
I-1113	64	2.986	10					
I-1114	20	2.492	28					
I-1115	28	2.503	32					
I-1116	40	2.62	13					
I-1117	55	2.611	10					
I-1118	24	2.341	37					
I-1119	26	2.507	31					
I-1120	85	2.544	41					
I-1121	18	2.306	41					
I-1122	34	2.412	14					
I-1123	64	2.465	12					
I-1124	12	2.222	47			>20		
I-1125	16	2.394	45			>20		
I-1126	32	2.419	49					
I-1127	18	2.183	47					
I-1128	20	2.297	23					
I-1129	39	2.335	29					
I-1130	6		15			7.6		
I-1131	7		39			18.8		
I-1132	21		49			>>20		
I-1133	5		-1					
I-1134	6							
I-1135	20		39					
I-1136	16		40			14.9		

I-1137	8		-1			12.0		
I-1138	18		-1			19.8		
I-1139	22		-1			18.0		
I-1140	33		10					
I-1141	13		44					
I-1142	22		46					
I-1143	12		44					
I-1144	28		32					
I-1145	18		10					
I-1146	33		18					
I-1147	10		23					
I-1148	50		10					
I-1149	70		10					
I-1150	12		18					
I-1151	30		10					
I-1152	65		10					
I-1153	12		-1					
I-1154	45		-1					
I-1155	60		-1					
I-1156	14		48					
I-1157	36		15					
I-1158	168		29					
I-1159	61	1.876	45					
I-1160	575	1.406	-1					
I-1161	24	2.076	-1			>20		
I-1162	1534		-1					
I-1163	691	2.059	48					
I-1164	162	2.13	50					
I-1165	722		-1					
I-1166	14		14			14.6		
I-1167	34		10			11.7		
I-1168	25		10					
I-1169	159		10					
I-1170	15		10			13.5		
I-1171	70		-1					
I-1172	45		-1					
I-1173	12		10			17.2		
I-1174	43		10					
I-1175	24		10					
I-1176	169		10					
I-1177	25		35			4.3		

I-1178	54.5		-1					
I-1179	346		44					
I-1180	87		31					
I-1181	225.5		50					
I-1182	144.5		48					
I-1183	409		50					
I-1184	175.5		45					
I-1185	203		33					
I-1186	127.5		46					
I-1187	80.5		42					
I-1188	22.5		18			7.2		
I-1189	94.5		10					
I-1190	58.5		10					
I-1191	38.5		10					
I-1192	81.5		10					
I-1193	78.5		10					
I-1194	66.5		10					
I-1195	29.5		10			16.2		
I-1196	85		10					
I-1197	44		10					
I-1198	65		47					
I-1199	44.5		19					
I-1200	99		48					
I-1201	13		47					
I-1202	16		50					
I-1203	16		50			10.0		
I-1204	81		50					
I-1205	987		50					
I-1206	32		50			27.8		
I-1207	40		11			7.5		
I-1208	349		44					
I-1209	479		16					
I-1210	56		50					
I-1211	115		11					
I-1212	8663		-1					
I-1213	10000		-1					
I-1214	116		50					
I-1215	216		10					
I-1216	10000		10					
I-1217	10000		15					
I-1218	10					>20		

I-1219	7					>20		
I-1220	11					17.3		
I-1221	14					23.4		
I-1222	511							
I-1223	550							
I-1224	389							
I-1225	305							
I-1226	559							
I-1227	10000							
I-1228	100							
I-1229	134							
I-1230	10000							
I-1231	10000							
I-1232	31							
I-1233	24							
I-1234	41							
I-1235	27							
I-1236	69							
I-1237	31							
I-1238	44							
I-1239	33							
I-1240	33					11.5	4.9	
I-1241	19					15.7	3.8	
I-1242	30					>>20	4.8	
I-1243	82							
I-1244	18					17.7	13.9	
I-1245	9					12.2	7.3	
I-1246	13					24.3	15.9	
I-1247	33					>20	>20	
I-1248	19					29.7		
I-1249	17					25.2		
I-1250	31					>20		
I-1251	1940							
I-1252	546		44					
I-1253	14		42			>20		
I-1254	530		-1					
I-1255	32		50					
I-1256	1466							
I-1257	11							
I-1258	17		-1			>20		
I-1259	10		-1			18.1		

I-1260	23		50					
I-1261	31		50					
I-1262	1124		49					
I-1263	43		12			20.0		
I-1264	157		10					
I-1265	152		10					
I-1266	755		10					
I-1267	181		10					
I-1268	198		-1					
I-1269	173		10					
I-1270	3699		10					
I-1271	682		10					
I-1272	331		21					
I-1273	9		32			>20		
I-1274	13		10			>20		
I-1275	9		-1			27.8		
I-1276	10		-1			>20		
I-1277	17		-1			>20		
I-1278	10		25			18.0		
I-1279	12		14			22.9		
I-1280	22		10			24.7		
I-1281	10		14					
I-1282	34		24					
I-1283	26		10					
I-1284	10000		10					
I-1285	10000		10					
I-1286	10000		10					
I-1287	10000		10					
I-1288	1164		10					
I-1289	10000		10					
I-1290	10000		10					
I-1291	10000		10					
I-1292	10000		10					
I-1293	10000		-1					
I-1294	10000		10					
I-1295	10000		10					
I-1296	3785		10					
I-1297	10000		-1					
I-1298	10000		10					
I-1299	10000		10					
I-1300	10000		10					

I-1301	10000		-1					
I-1302	45		-1					
I-1303	86		28					
I-1304	31		10					
I-1305	6		49			9.7		
I-1306	6		50			6.6		
I-1307	21		20					
I-1308	25		47					
I-1309	59		10					
I-1310	124		10					
I-1311	38		10					
I-1312	14		46					
I-1313	12		10					
I-1314	9		48			>>20		
I-1315	13		10			7.2		
I-1316	11		48			6.8		
I-1317	9		49			9.7		
I-1318	14		-1			4.8		
I-1319	10		10			4.2		
I-1320	10		44			26.2		
I-1321	8		48			10.9		
I-1322	11		33			9.1		
I-1323	6		48			11.7		
I-1324	14		25			5.8		
I-1325	14		12			5.7		
I-1326	12		-1			6.2		
I-1327	13		39			7.0		
I-1328	11		26			5.4		
I-1329	23		45			35.0		
I-1330	104		-1					
I-1331	75		10					
I-1332	11		13			2.5		
I-1333	20		10			2.8		
I-1334	30		10			4.2		
I-1335	13		11			2.3		
I-1336	29		10			2.7		
I-1337	85		10			6.2		
I-1338	10		10			3.6		
I-1339	33		10			5.2		
I-1340	159		10			6.8		
I-1341	17		-1			3.5		

I-1342	35		-1			7.0		
I-1343	150		10					
I-1344	11		44			4.1		
I-1345	15		37			4.7		
I-1346	2319		50					
I-1347	2369		-1					
I-1348	1181		-1					
I-1349	161		-1					
I-1350	158		28					
I-1351	258		14					
I-1352	12		50			19.5		
I-1353	18		44			8.8		
I-1354	48		-1					
I-1355	213							
I-1356	23		48			>>20		
I-1357	10		48			33.6		
I-1358	19		10					
I-1359	88		34					
I-1360	135		-1					
I-1361	39		-1					
I-1362	23		-1					
I-1363	9		12			5.5		
I-1364	9		17					
I-1365	9		22					
I-1366	7		10					
I-1367	31		10					
I-1368	44		10					
I-1369	29		10					
I-1370	18		10					
I-1371	22		10					
I-1372	29		10					
I-1373	5		50					
I-1374	17		10			8.8		
I-1375	7		50					
I-1376	4208		10					
I-1377	1003		10					
I-1378	6171		10					
I-1379	1435		10					
I-1380	10000		10					
I-1381	10000		10					
I-1382	2853		10					

I-1383	1655		10					
I-1384	10000		10					
I-1385	1082		10					
I-1386	2248		10					
I-1387	6938		10					
I-1388	18							
I-1389	9							
I-1390	16							
I-1391	11							
I-1392	13							
I-1393	34							
I-1394	9							
I-1395	33							
I-1396	33							
I-1397	48							
I-1398	73							
I-1399	13							
I-1400	5							
I-1401	5							
I-1402	9							
I-1403	6							
I-1404	113							
I-1405	9							
I-1406	6							
I-1407	5							
I-1408	33							
I-1409	74							
I-1410	80							
I-1411	109							
I-1412	79							
I-1413	74							
I-1414	84							
I-1415	72							
I-1416	57							
I-1417	198							
I-1418	106							
I-1419	152							
I-1420	124							
I-1421	134							
I-1422	388							
I-1423	389							

I-1424	235							
I-1425	239							
I-1426	203							
I-1427	33							
I-1428	41							
I-1429	10000							
I-1430	10000							
I-1431	34							
I-1432	27							
I-1433	71							
I-1434	83							
I-1435	90							
I-1436	121							
I-1437	7							
I-1438	5							
I-1439	349							
I-1440	26							
I-1441	327							
I-1442	1500							
I-1443	24							
I-1444	6558							
I-1445	13							
I-1446	9							
I-1447	11							
I-1448	20							
I-1449	16							
I-1450	11							
I-1451	13							
I-1452	66							
I-1453	52							
I-1454	22							
I-1455	13							
I-1456	16							
I-1457	43							

[0780] COLO320DM proliferation assay IC50: In some embodiments, inhibition of cell proliferation by provided technologies were assessed using cell lines related to or from certain conditions, disorders or diseases. In some embodiments, cell proliferation was assessed in COLO320DM cells. In some embodiments, assessment was performed using the following procedure: On Day 1, cultured COLO320DM cells in a T75 flask were trypsinized in 3 mL of 0.25% trypsin/EDTA for 5 min and

quenched with 10 mL RPMI-1640 + 4% HI FBS assay media. The cells were spun down at 1200 rpm for 5 min, the cell pellet collected and re-suspended at 5000 cells/mL in assay media. Using a Combi liquid handler, cells were dispensed (50 uL, 250 cells/well) into three 384 well plates. Plates were incubated at 37 °C, 5% CO2 for 18-22 h. On day 2, compounds were added. A liquid handling system was used to prepare the compound dilution and dispense compound into assay plates. The compounds were serially diluted 1/2 in 90% DMSO to create a 7 point dose curve. From compound plate, 100 nL of compound were dispensed directly into wells of the assay plates to create a dose curve starting at 20uM and ending at 313nM. Assay plates were incubated at 37 °C, 5% CO2 for 96 h. On day 6, assay plates were removed from the incubator and allowed to sit at room temperature for 30 min. Using a liquid handler, 20 uL of CellTiter Glo reagent was added to each well. The assay plates were shaken for 2 min and allowed to sit on the bench for 10-15 minutes. The assay plates were read using the CellTiter Glo protocol on a GloMax microplate reader, and the data analyzed using GraphPad Prism. Activities of various agents, including various stapled peptides in Table E2, were confirmed. Certain results are presented in Table E2-1 below.

[0781] Table E2-1. Certain data of various peptide compositions.

Structural information are described in Table E3. Compositions of stapled peptides.

1. Compound ID
2. beta-Catenin FP IC50 (nM)
3. NanoBRET Abs IC50 (uM)
4. DLD1 4% Abs IC50 (uM)
5. COLO320DM Proliferation Abs IC50 (uM)
6. Calculated Mass
7. Found m/z (positive mode)
8. Found m/z (negative mode)
9. C=C double bond (e.g., −CH=CH−) conversion. A: −CH=CH− in each staple reduced to $-CH_2-CH_2-$;

B: −CH=CH− in N-terminal side staple converted to an epoxide moiety (e.g., )

1	2	3	4	5	6	7	8	9
I-1					1822.857			
I-2					1822.857			
I-3					1834.857	918.8	1834.2	
I-4					1834.857	918.8	1834.2	
I-5					1848.872	925.8	1848.2	
I-6					1848.872	925.8	1848.2	
I-7					1896.872	949.8	1896.2	
I-8					1896.872	949.8	1896.2	

I-9					1853.878	1855.5	1853.2	
I-10					1853.878	1855.6	1853.2	
I-11					1928.914	1952.5	1928.2	
I-12					1928.914	1952.6	1928.2	
I-13					1818.898	1842.4	1818.2	
I-14					1818.898	1842.5	1818.2	
I-15					1858.929	1882.5	1858.2	
I-16					1858.929	1882.5	1858.2	
I-17					1832.914	1856.5	1832.2	
I-18					1832.914	1856.5	1832.2	
I-19					1864.831	1888.4	1864.1	
I-20					1864.831	1888.4	1864.1	
I-21					1878.846	1902.4	1878.2	
I-22					1878.846	1902.4	1878.2	
I-23					1892.862	1916.4	1892.2	
I-24					1892.862	1916.4	1892.2	
I-25					1808.841	1810.4	1808.1	
I-26					1822.857	1824.4	1822.1	
I-27					1808.841	1810.4	1808.1	
I-28					1822.857	1824.4	1822.1	
I-29					1822.857	1829.3	1805	
I-30					1806.825	1808.3	1806.1	
I-31					1806.825	1830.3	1806.1	
I-32					1792.81	1794.3	1792	
I-33					1792.81	1794.3	1792	
I-34					1822.857	1824.3	1822.1	
I-35					1806.825	1830.2	1806	
I-36					1794.825	1818.3	1794	
I-37					1794.825	1796.3	1794	
I-38					1792.81	1816.3	1792	
I-39					1806.825	1808.3	1806.1	
I-40					1806.825	1808.3	1806.1	
I-41					1780.81	1782.3	1780	
I-42					1780.81	1782.3	1780	
I-43					1822.857	1824.3	1822	
I-44					1822.857	1824.4	1822	
I-45					1808.841	1810.3	1808	
I-46					1808.841	1810.3	1808	
I-47					1735.825	1737.3	1735	
I-48					1735.825	1737.3	1735	
I-49					1794.825	1796.3	1794	
I-50					1794.825	1796.3	1794	
I-51					1792.81	1794.3	1792	

I-52	3195				1779.887	1781.5		
I-53	5000				1824.872	1826.5		
I-54	3187				1824.872	1826.6		
I-55	5000				1810.857	1812.5		
I-56					1866.898	1868.6		
I-57					1866.898	1868.6		
I-58					1833.873	1835.6		
I-59					1833.873	1835.7		
I-60					1826.888	1850.6	1826.3	
I-61					1826.888	1850.6	1826.3	
I-62					1836.836	1838.6	1936.2	
I-63					1836.836	1838.6	1936.2	
I-64	4246				1826.863	1828.7		
I-65					1826.863	1828.7	1826.4	
I-66	1090				1840.878	1842.8	1840.5	
I-67	1227				1840.878	1842.7		
I-68					1824.92	1826.8		
I-69					1824.92	1826.7		
I-70					1838.936	1840.8		
I-71					1838.936	1840.9	1838.5	
I-72					1864.951	1867	1864.6	
I-73					1864.951	1866.8		
I-74					1826.888	1850.6	1826.3	
I-75					1826.888	1850.6	1826.3	
I-76					1786.857	1788.6	1786.2	
I-77					1838.832	1840.7	1838.4	
I-78	5000				1838.832	1840.6		
I-79					1856.822	1858.6		
I-80					1821.836	1823.7	1821.4	
I-81					1821.836	1823.7	1821.4	
I-82					1821.836	1823.7	1821.4	
I-83					1821.836	1823.7	1821.4	
I-84					1821.836	1823.8	1821.4	
I-85					1821.836	1823.7	1821.3	
I-86					1821.836	1823.7	1821.3	
I-87					1821.836	1823.7	1821.4	
I-88					1821.836	1823.7	1821.4	
I-89					1863.847	1187.8	1163.5	
I-90					1863.847	1865.8		
I-91					1863.847	1865.9		
I-92					1863.847	1887.7	1863.3	
I-93					1812.872	1814.7		
I-94					1812.872	1814.8		

I-95					1812.872	1814.9		
I-96					1812.872	1814.7		
I-97					1866.898	1868.7		
I-98					1866.898	1868.8		
I-99					1852.882	1854.8		
I-100					1852.882	1876.8	1852.4	
I-101					1850.852	1852.6		
I-102					1850.852	1852.6		
I-103					1850.852	1852.9		
I-104					1850.852	1852.7		
I-105					1863.847	1887.5		
I-106					1863.847	1865.6		
I-107					1863.847			
I-108					1863.847	1865.6		
I-109					1863.847	1887.6		
I-110					1864.831	1866.6		
I-111					1864.831	1866.7		
I-112					1870.857	1872.6		
I-113					1870.857	1872.6		
I-114					1902.898	1904.7		
I-115					1902.898	1904.8		
I-116					1902.898	1904.8		
I-117					1834.857	1836.6		
I-118					1834.857	1858.9	1834.2	
I-119					1850.852	1852.7	1850.4	
I-120					1850.852	1852.8	1850.4	
I-121					1788.8	1790.4		
I-122					1788.8	1790.6		
I-123	2112				1793.903	1795.8	1793.4	
I-124					1778.903	1780.8	1778.4	
I-125	3059				1778.903	890.9.	1778.4	
I-126					1792.919	1794.8		
I-127	4841				1792.919	1794.8		
I-128					1665.844	1667.7		
I-129	1981				1807.919	905.6	1808.5	
I-130					1838.888	1840.8		
I-131	2160				1838.888	1840.8		
I-132	5000				1779.887	1781.8		
I-133	5000				1750.897		1751.4	
I-134	2696				1750.897		1751.2	
I-135	1867				1736.881	1760.7	1736.4	
I-136					1807.919	1809.9		
I-137					1807.919	1810.1	1807.6	

I-138					1777.944	1628.9		
I-139					1777.944	1779.9		
I-140	2269				1804.908	1806.8	1804.5	
I-141					1676.849	1700.8	1676.4	
I-142					1822.898	1824.9	1822.6	
I-143	2272				1805.903	1807.8	1805.5	
I-144	146.5				1810.864	1812.8	1810.5	
I-145					1830.923	1832.9	1830.5	
I-146					1811.893	1813.8	1811.4	
I-147	1637				1717.835	1719.8	1717.4	
I-148	2772				1703.82	1705.7	1703.3	
I-149					1755.826	1757.8		
I-150					1755.826	1757.7		
I-151					1618.767	1642.6		
I-152	5000				1783.857	1785.8		
I-153	2135				1774.857	1776.8		
I-154	5000				1717.835	1719.7		
I-155	5000				1717.835	1719.7		
I-156					1798.831	1729.7		
I-157					1772.841	1796.7	1772.4	
I-158					1772.841	1774.8	1772.5	
I-159					1729.835	1753.7	1729.4	
I-160					1729.835		1729.4	
I-161					1802.815	1804.7	1802.4	
I-162					1802.815	1804.8	1802.5	
I-163					1808.805	1810.7		
I-164					1808.805	1832.7	1808.5	
I-165					1823.913	1825.8	1823.6	
I-166	2164				1811.893	1813.8	1811.5	
I-167					1795.919	1797.9		
I-168					1795.919	1797.9		
I-169					1861.89	1863.9		
I-170					1833.934	1836.1		
I-171					1833.934	1838		
I-172	5000				1836.945	1838.9		
I-173	3116				1836.945	1839		
I-174	1760				1859.925	1862.3	1860.3	
I-176	1992				1844.95	1847.3	1845.4	
I-178	1633				1831.893	1834.2	1832.1	
I-180	561				1864.94	934.1	1865.4	
I-181	310				1864.94	1867.4	1865.6	
I-182	2800				1793.903	1796.2		
I-183					1883.856	1886.3	1884.2	

I-184	3109				1840.889	1843.2	1841.4	
I-185					1755.836	879.5	1756.2	
I-186	5000				1708.85	856	1709.1	
I-187	3318				1708.85	856		
I-188	1597				1904.91	1907.4	1905.4	
I-190	696				1904.91	1907.4		
I-191	1656				1736.881	870		
I-193	533				1736.881	870		
I-194	1008				1807.919	905.6		
I-195					1825.944	1828.4	1826.3	
I-196					1839.96	1842.6		
I-197					1839.96	1842.3	1840.6	
I-198	5000				1792.919	898.1	1793.4	
I-199	5000				1792.919	898.1	1793.4	
I-200	5000				1792.919	898.1	1793.3	
I-201					1825.944	1828.4	1826.2	
I-202					1841.939	1844.4	1842.5	
I-203					1839.96	1842.4		
I-204					1843.935	1946.4		
I-205					1791.96	897.6	1792.4	
I-206					1815.935	1818.3	1816.5	
I-207	1745				1807.919	1810.3		
I-209					1847.875	1850.3		
I-211	5000				1847.875	1850.3	1848.3	
I-213					1826.94	1829.4	1827.4	
I-214					1826.94	1829.5	1827.5	
I-215					1791.96	1794.3	1792.5	
I-217	1957				1823.913	1826.2	1824.4	
I-219	2855				1829.884	1832.5	1830.3	
I-221					1822.82	913	1823.3	
I-223					1822.82	913	1823.4	
I-225					1910.794	957	1911.2	
I-227					1910.794	1913	1911	
I-229					1826.94	1929.3	1927.5	
I-230					1826.94	1929.3	1927.2	
I-231					1867.901	1870.7	1868.4	
I-232					1861.944	1964.4	1862.3	
I-233					1850.94	1853.4	1851.4	
I-234					1861.944	1864.4	1862.6	
I-235					1887.96	945.7	1888.4	
I-236	5000				1847.875	1850.2	1848.4	
I-238	1592				1847.875	1850.2	1848.4	
I-240					1847.875	1850.2	1848.3	

I-242					1847.875	925.6		
I-244					1879.916	1882	1880	
I-246					1879.916	1882.3		
I-248					1847.875	1850.3		
I-250	5000				1847.875	1850.2		
I-252					1847.875	1850.3		
I-254	5000				1847.875	1850.3	1848.3	
I-256					1879.935	1882	1880	
I-257					1829.919	1832	1830	
I-258					1829.919	1832	1830	
I-259					1847.91	1850	1848	
I-260	5000				1797.878	1800	1798	
I-261	5000				1797.878	1800	1798	
I-262	5000				1815.868	1818	1816	
I-263	5000				1815.868	1818	1816	
I-264	5000				1797.878	1800	1798	
I-265	3762				1797.878	1800	1798	
I-266	5000				1797.878	1800	1798	
I-267	5000				1815.868	1818	1816	
I-268					1793.903	1796	1794	
I-269					1809.898	1812	1810	
I-270	5000				1812.924	1815	1813	
I-271	5000				1812.924	1815	1813	
I-272					1812.924	1815	1813	
I-273					1841.939	1844	1842	
I-274					1827.924	1830	1828	
I-275	5000				1829.903	1832	1830	
I-276	3428				1829.903	1832	1830	
I-277					1829.903	1832	1830	
I-278					1829.903	1832	1830	
I-279					1793.903	1796	1794	
I-280					1793.903	1796	1794	
I-281					1793.903	1796	1794	
I-282					1793.903	1796	1794	
I-283					1747.846	1750	1748	
I-284					1746.862	1749	1747	
I-285	5000				1769.878	1772	1770	
I-286	4482				1694.834	849	1694.9	
I-287	4954				1751.856	1754	1752	
I-288	1313				1751.856	1754	1752	
I-289	5000				1651.829	827.5		
I-290	3286.5				1651.829	827.5		
I-291	3129				1722.866	863		

I-292	1871				1722.866	863		
I-293	139.5				1907.878	955.6	1908.1	
I-294	130				1825.839	914.6	1826.3	
I-295	5000				1907.896	955.7	1908	
I-296					1850.874	827.1	1851.2	
I-297					1878.906	941.2	1879.2	
I-298					1866.869	935.1	1867.5	
I-299	1303				1798.828	901.1	1799.3	
I-300					1879.901	941.7	1880.5	
I-301					1842.906	923.1	1843.4	
I-302					1886.801	1889.1	1887.2	
I-303					1887.96	1890.3	1888.3	
I-304	5000				1801.919	1804.1	1802.2	
I-305	3982.5				1801.919	1804.1	1802.2	
I-306	5000				1813.848	908.8	1814	
I-307	4196				1813.848	908.8	1814	
I-308	5000				1813.848	908.8		
I-309	3118				1813.848	908.8		
I-310					1813.848	908.8		
I-311					1813.848	908.8		
I-312					1813.848	908.8		
I-313					1813.848	908.8		
I-314					1815.935	909.7		
I-315					1815.935	909.6		
I-316	3982				1751.856	877.5		
I-317	5000				1797.878	900.6		
I-318	4633				1797.878	900.6		
I-319	1419				1797.878	900.6		
I-320					1769.878	886.6		
I-321					1769.878	886.6		
I-322	5000				1794.898	899.1		
I-323	3471				1794.898	899.1		
I-324					1826.94	915.2		
I-325	1310				1785.844	894.6		
I-326	1752				1785.844	894.6	1786.4	
I-327	4724				1769.866	886.5	1770.3	
I-328	1914				1769.866	886.5	1770.3	
I-329	5000				1783.893	1786.3		
I-330	5000				1783.893	1786.1		
I-331	5000				1783.893	1786		
I-332	5000				1783.893	1786.1		
I-333	2756				1726.824	871	1739.1	
I-334	5000				1738.861	865	1727.2	

I-335	1544				1738.861	865	1727	
I-336	153				1839.854	1842.1		
I-337	5000				1839.854	921.6	1840.2	
I-338	5000				1839.854	921.6	1840.2	
I-339	5000				1840.838	922.1	1841.2	
I-340	5000				1840.838	1843.2	1841.3	
I-341	2000				1812.843	1815	1813.3	
I-342	58.5				1798.828	1801.1	1799.3	
I-343	172				1811.823	1814.1	1812.3	
I-344	42				1811.823	1814.1	1812	
I-345	134				1826.859	1829.2	1827.2	
I-346	180				1853.87	1856.2	1854.3	
I-347	121.5				1853.87	1856.2	1854.3	
I-348	5000				1735.897	869.5		
I-349	5000				1735.897	869.5	1736	
I-350	5000				1735.897	869.6	1736.3	
I-351	5000				1735.897	869.5		
I-352	5000				1735.897	869.5		
I-353	5000				1703.856	853.5	1704.1	
I-354	5000				1703.856	853.5	1704.3	
I-355	5000				1703.856	1706	1704.2	
I-356	5000				1703.856	853.5	1704.1	
I-357	5000				1664.845	834	1665.2	
I-358	5000				1664.845	834		
I-359	5000				1821.844	1824.2	1822.3	
I-360	145.5				1834.839	1837.1		
I-361	42				1834.839	1837.1		
I-362	3656				1758.808	1761.1		
I-363	5000				1758.808	1761		
I-364	5000				1758.808	1761.1		
I-365	2715				1782.833	893.1	1783.4	
I-366	1445				1782.833	1785	1783.1	
I-367	177				1782.833	1785.1	1783.3	
I-368	5000				1808.883	906.1	1809.3	
I-369	2311				1782.833	893.6	1784.2	
I-370	1563				1818.833	1821.2	1819.2	
I-371	1389				1786.808	895.1		
I-372	2093				1800.823	1803.4		
I-373	945				1864.836	941.1	1879.2	
I-374	3011				1836.804	1853.4	18951	
I-376	1321				1836.804	927.1	1851.4	
I-378	1336				1893.826	955.6	1908.3	
I-380	552				1893.826	955.6	1908.2	

I-381	3653				1813.855	1816.3	1814.3	
I-382	2064				1813.855	908.6	1814.3	
I-383	5000				1811.859	1814.3	1812.2	
I-384	177				1811.859	1814.2	1812	
I-385	3150				1811.859	907.6		
I-386	5000				1811.859	1814.3		
I-387	2621				1811.859	1814.3		
I-388	5000				1846.845	1877	1875.1	
I-389	5000				1846.845	939	1875.1	
I-390	3422				1846.845	1877	1875	
I-391	1913				1846.845	1876.8	1875	
I-392	5000				1802.895	895.5		
I-393	1953				1802.895	895.5		
I-394	5000				1846.845	1214.5	1212.4	
I-395	5000				1824.88	1192.5	1190.4	
I-396	3427				1836.871		1937.3	
I-397	2229				1836.871	1839.1	1837.2	
I-398	2155				1881.856	1884.3		
I-399	2499				1865.861	1868.2	1866	
I-400	3587				1910.846	1913.1	1911.2	
I-401	134				1863.801		1863.8	
I-402	5000				1852.837	1855.1	1853.2	
I-403	2128				1850.887	1853	1851.2	
I-404	1851				1968.874		1969.3	
I-405	3821				2013.859		2014.4	
I-406	94				1839.854	1841.9		
I-407	30				1881.901	1884		
I-408	120				1753.843	878.5	1754.2	
I-409	70				1753.843	878.5	1754	
I-410	50				1867.885	1869.9		
I-411	189				1824.88	1826.9		
I-412	92				1905.848		1906.1	
I-413	90				1849.861	926.5		
I-414	3417				1863.877	1866		
I-415	2201				1863.877	1866		
I-416	5000				1863.877	1866		
I-417	5000				1863.877	1866		
I-418	149				1848.855	1851		
I-419	23				1848.855	1850.9		
I-420	127.5				1821.844	1824.1	1822.1	
I-421	99				1834.839	1836.9		
I-422	27				1834.839	1836.9		
I-423	105				1812.843		1813.2	

I-424	170				1825.839	1828.4		
I-425	50				1825.839		1826.3	
I-426	109				1845.811	1848.4	1846.6	
I-427	38.5				1845.811	1848.2	1848.4	
I-428	60				1845.811	1848.2	1846.2	
I-429	146				1863.801	1866.2	1864.3	
I-430	154				1872.802	1875.1	1873	
I-431	1320				1735.743		1736.1	
I-432	145				1697.78		1697.8	
I-433	136				1812.843		1813.1	
I-434	67.5				1843.829	1845.9	1844	
I-435	70				1859.8	1862.4		
I-436	56				1903.749	1906.9	1905.1	
I-437	26	17.5			1855.849	1857.9	1856.1	
I-438	5000				1829.845	1831.9	1830.3	
I-439	5000				1829.845	1831.9	1830	
I-440	5000				1829.845	1831.9	1830.1	
I-441	133				1870.824	1872.8	1870.8	
I-442	4484				1839.854	1841.9	1840.1	
I-443	2126				1839.854	1841.9	1840	
I-444	80				1835.845		1836	
I-445	4962				1835.845		1835.9	
I-446	130				1831.795	1833.9	1832	
I-447	74				1831.795		1832	
I-448	92				1831.795	1833.9	1831.9	
I-449	53				1831.795		1831.8	
I-450	3717				1846.84	1848.9	1846.9	
I-451	5000				1846.84		1847	
I-452	1656				1846.84		1846.8	
I-453	1554				1843.829	1845.8	1844	
I-454	125				1843.829	923.5.	1844.2	
I-455	83.5				1843.829	923.5.	1844.2	
I-456	2168				1839.854	921.5.	1840.1	
I-457	1435				1839.854	921.5.	1839.9	
I-458	101.5				1839.854	921.5.	1840.1	
I-459	183				1839.854	921.5.	1840.1	
I-460	195.5				1815.818	909.5.	1815.9	
I-461	125				1840.849	1842.9	1841.2	
I-462	28	>>20			1868.808	1870.4		
I-463	92				1882.824	1884.4		
I-464	57				1882.824	1884.4		
I-465	81				1820.823	1822.8	1820.8	
I-466	19				1820.823	1822.8	1820.9	

I-467	44				1853.87	1855.8		
I-468	27				1853.87	1855.8		
I-469	27				1862.87	1864.8		
I-470	11				1862.87	1864.8		
I-471	52				1890.901	1892.8		
I-472	62				1876.886	1878.8		
I-473	121				1839.854	1841.7		
I-474	43				1839.854	1841.7		
I-475	102				1867.885	1869.8		
I-476	48				1867.885	1869.8		
I-477	119				1869.865	1871.7		
I-478	71				1848.855	1850.9		
I-479	27				1848.855	1850.8		
I-480	176				1848.855	1850.9		
I-481	42				1848.855	1850.9		
I-482	118				1839.891	1841.8		
I-483	5000				1860.876	932		
I-484	5000				1860.876	932		
I-485	34	11.3			1887.858	1889.8		
I-486	147				1845.811	1847.8		
I-487	45				1845.811	1847.7		
I-488	43				1896.858	1898.8		
I-489	57				1882.842	1884.8		
I-490	88				1848.843		1848.7	
I-491	153				1812.843		1812.7	
I-492	53				1812.843		1812.8	
I-493	88				1798.828		1798.8	
I-494	82				1839.854	1841.8		
I-495	181				1867.885	1869.8	1867.9	
I-496	5000				1825.875	1827.8		
I-497	5000				1825.875		1825.8	
I-498	5000				1825.875	1827.8	1825.8	
I-499	123				1945.868	1947.8		
I-500	176				1987.915	1989.9		
I-501	94				1907.842	1909.8		
I-502	55				1907.842	1909.7		
I-503	84				1889.851	1891.8		
I-504	65				1916.842	1918.8		
I-505	23	4.9	9.4		1881.901	1883.9		
I-506	25	8.9			1890.901	1892.9		
I-507	192				1812.843	907.9		
I-508	73				1812.843	907.9		
I-509	99				1796.848	899.9		

I-510	128				1864.849	1866.9		
I-511	40				1864.849	1866.8		
I-512	20	12.3			1906.896	1908.9		
I-513	143				1877.845	1879.7		
I-514	30	>>20			1919.892	1921.8		
I-515	54				1840.795	1842.9		
I-516	23	30.5			1840.795	1842.8		
I-517	15	9.7			1882.842	1884.9		
I-518	143				1831.795	917.4		
I-519	33	28.8			1831.795	917.4		
I-520	45				1873.842	938.4		
I-521	23	15.4			1873.842	938.4		
I-522	75				1867.885	935.4		
I-523	44				1867.885	935.4		
I-524	2550				1832.79	1834.6		
I-525	196				1869.865	1871.6	1869.6	
I-526	56				1869.865	1871.6		
I-527	98				1911.912	1913.7		
I-528	63				1911.912	1913.7	1911.7	
I-529	5000				1874.837	939		
I-530	5000				1874.837	939		
I-531	5000				1888.853	946		
I-532	5000				1888.853	946		
I-533	155				1860.822	931.9		
I-534	5000				1874.837	938.9		
I-535	5000				1837.911	1839.8		
I-536	4469				1823.896	1825.7		
I-537	5000				1837.911	1839.8		
I-538	5000				1835.896	1837.7		
I-539	5000				1849.911	1851.8		
I-540	5000				1809.88	906.4		
I-541	180				1883.88	943.4		
I-542	109				1883.88	943.4		
I-543	32	17.0			1876.886	1878.8	1876.6	
I-544	24	4.6			1895.917	1897.6	1895.5	
I-545	21	3.5			1895.917	1897.6	1895.5	
I-546	16	12.1			1867.885	1869.5		
I-547	43				1867.885	1869.4		
I-548	17	15.6			1867.885	1869.4		
I-549	71				1883.88	1885.4		
I-550	30	21.4			1883.88	1885.4		
I-551	45				1859.826	1861.4		
I-552	15.5				1859.826	1861.4		

I-553	61				1892.881	1894.7		
I-554	27.5				1892.881	1894.6		
I-555	41				1868.827	1870.7		
I-556	20				1868.827	1870.6		
I-557	35	16.9			1867.885	1869.5		
I-558	56				1867.885	1869.5		
I-559	43				1867.885	1869.5		
I-560	81				1876.886	1878.7		
I-561	34				1876.886	1878.7		
I-562	51				1853.87	1855.5		
I-563	19	15.7			1853.87	1855.5		
I-564	36	>>20			1862.87	1864.7		
I-565	13	26.0			1862.87	1864.7		
I-566	76				1839.854	1841.5		
I-567	37				1839.854	1841.5		
I-568	73				1853.87	1855.5		
I-569	42				1853.87	1855.5		
I-570	56				1862.87	1864.7		
I-571	32	15.6			1862.87	1864.7		
I-572	73				1825.839	1827.4		
I-573	36	33.3			1825.839	1827.4		
I-574	36	>>20			1834.839	1836.7		
I-575	21				1834.839	1836.7		
I-576	23	11.1			1867.885	1869.5		
I-577	13	10.4			1867.885	1869.5		
I-578	5000				1881.901	1883.7	1881.7	
I-579	5000				1877.862	1879.6	1877.6	
I-580	114				1876.886	1878.8	1876.7	
I-581	112				1876.886	1878.8	1876.7	
I-582	17.5	15.8			1876.886	1878.8	1876.7	
I-583	69				1876.886	1878.8	1876.7	
I-584	33				1876.886	1878.8	1876.8	
I-585	5000				1881.901	1883.7	1881.6	
I-586	5000				1881.901	1883.7	1881.6	
I-598	845				1944.912	973.9.	1944.6	
I-599	138				1944.912	973.9.	1944.7	
I-600	796				1957.932	1959.7	1957.7	
I-601	419				1957.932	1959.7	1957.7	
I-602	3150				1972.943	988.98	1972.6	
I-603	392				1880.917	941.9.	1880.7	
I-604	692				1909.944	1911.7	1909.6	
I-605	632				1909.944	1911.7	1909.7	
I-606	289				1943.917	1945.7	1943.7	

I-607	253				1943.917	1945.7	1943.7	
I-608	211				1924.943	1926.7	1924.7	
I-609	80				1924.943	1926.7	1924.7	
I-610	54				1978.915	1980.7	1978.6	
I-611	55				1978.915	1980.7	1978.6	
I-612	64				1895.917	1897.7	1895.7	
I-613	1627				1908.96	1910.8	1908.6	
I-614	1143				1908.96	1910.8	1908.8	
I-615	50				1916.917	1918.8	1916.7	
I-616	108				1919.928	1921.8	1919.6	
I-617	253				1863.891	1865.9	1863.7	
I-618	135				1863.891	1865.7	1863.7	
I-619	44				1907.917	1909.6	1907.6	
I-620	35	12.0			1907.917	1909.5	1907.5	
I-621	58				1910.928	1912.5	1910.5	
I-622	230				1854.89	1856.5	1854.5	
I-623	103				1854.89	1856.4	1854.5	
I-624	273				1739.827	871.3	1739.4	
I-625	119				1739.827	871.3	1739.4	
I-626	5000				1779.858	891.3	1779.4	
I-627	338				1779.858	891.3	1779.4	
I-628	60				1782.869	892.8	1782.6	
I-629	36	30.0			1782.869	892.8	1782.3	
I-630	5000				1984.871			
I-631	5000				1984.871			
I-632	5000				1984.871			
I-633	88				1909.944	1911.7	1909.5	
I-634	425				1866.927	934.9	1866.5	
I-635	171				1900.911	951.9	1900.5	
I-636	198				1916.906	959.9	1916.5	
I-637	5000				1850.895	926.9	1850.4	
I-638	3876				1850.895	926.8	1850.5	
I-639	109				1840.875	921.8	1840.4	
I-640	87				1840.875	921.8	1840.4	
I-641	122				1854.89	928.8	1854.4	
I-642	118				1854.89	928.8	1854.4	
I-643	958				1939.922	971.4	1939.5	
I-644	808				1939.922	971.4	1939.5	
I-645	395				1852.911	927.9	1852.4	
I-646	461				1852.911	927.8	1852.4	
I-647	445				1923.948	1925.5	1923.5	
I-648	233				1923.948	1925.5	1923.4	
I-649	209				1957.932	1959.5	1957.5	

I-650	137				1957.932	1959.4	1957.4	
I-651	186				1897.896	1899.4	1897.3	
I-652	72				1897.896	1899.4	1897.3	
I-653	108				1938.923	1940.4	1938.4	
I-654	20	15.0			1938.923	1940.4	1938.4	
I-655	183				1996.943	1998.5	1996.5	
I-656	73				1923.948	1925.5	1923.4	
I-657	46				1923.948	1925.5	1923.4	
I-658	546				1923.948	963.3	1923.4	
I-659	430				1923.948	963.4	1923.4	
I-660	544				1957.932	980.4		
I-661	45				1897.896	950.5		
I-662	26	16.1			1897.896	950.5		
I-663	43				1938.923	971		
I-664	996				1996.943	999.8		
I-665	923				1996.943	999.7		
I-666	626				1923.948			
I-667	585				1923.948			
I-668	675				1881.901			
I-669	451				1881.901			
I-670	5000				1895.917			
I-671	3138				1895.917			
I-672	5000				1895.917			
I-673	5000				1881.901			
I-674	5000				1881.901			
I-675	4525				1895.917			
I-676	5000				1895.917			
I-677	22	6.7			1881.901	1883.3	1881.3	
I-678	26	16.8			1873.842	1875.3	1873.3	
I-679	7	17.1			1873.842	1875.3	1873.3	
I-680	32	34.4			1859.826	1861.3	1859.3	
I-681	12	25.1			1859.826	1861.3	1859.3	
I-682	41				1887.858	1889.3	1887.3	
I-683	19	6.7			1887.858	1889.3	1887.3	
I-684	15	14.3			1924.871	1926.3	1924.3	
I-685	25	19.4			1924.871	1926.3	1924.3	
I-686	5	12.1			1916.811	1918.3	1916.3	
I-687	12	29.3			1916.811	1918.3	1916.3	
I-688	6	30.1			1902.796	1904.3	1902.3	
I-689	11	33.9			1902.796	1904.3	1902.3	
I-690	7	17.8			1930.827	1932.3	1930.3	
I-691	9	17.0			1930.827	1932.4	1930.4	
I-692	9	25.6			1933.871	1935.7	1933.3	

I-693	12	28.5			1933.871	1935.7	1933.4	
I-694	5				1925.812	1927.7	1925.4	
I-695	5				1925.812	1927.7	1925.4	
I-696	5				1911.796	1913.6	1911.3	
I-697	5	14.7			1939.827	1941.7	1939.4	
I-698	5				1939.827	1941.7	1939.5	
I-699	43				1964.899	1966.4	1964.4	
I-700	49				1970.856	1972.4	1970.4	
I-701	34	18.1			1970.856	1972.4	1970.4	
I-702	76				1979.856	1981.6	1979.5	
I-703	57	11.9			1978.915	1980.5	1978.5	
I-704	49				1984.871	1986.5	1984.5	
I-705	58				1993.872	1995.8	1993.5	
I-706	57				2004.931	2006.5	2004.5	
I-707	46				2010.887	2012.5	2010.5	
I-708	52				2010.887	2012.5	2010.5	
I-709	54				2019.887	2021.8	2019.5	
I-710	73				1917.868	1919.2	1917.2	
I-711	88				1917.868	1919.3	1917.2	
I-712	92				1753.843	878.1	1753.1	
I-713	70				1753.843	878.1	1753.1	
I-714	131				1739.827	871.1	1739.1	
I-715	60.5				1739.827	871.1	1739	
I-716	91				1745.783	874.1	1745.1	
I-717	39				1745.783	874.1	1745.1	
I-718	82				1759.799	881.1	1759.2	
I-719	38				1759.799	881.1	1759.1	
I-720	75				1745.783	874.1	1745.1	
I-721	46				1745.783	874.1	1745.1	
I-722	1128				1887.948	945.3	1887.2	
I-723	3833				1957.932	980.3	1957.3	
I-724	114				1911.912	957.2	1911.2	
I-725	5000				1957.932	1959.2	1957.2	
I-726	5000				1867.885	1869.2	1867.2	
I-727	5000				1861.932	1863.2	1861.2	
I-728	289				1847.917	1849.2	1847.2	
I-729	56				1938.923	970.8	1938.3	
I-730	35	11.2			1938.923	970.8	1938.2	
I-731	34	11.6			1938.923	970.8	1938.3	
I-732	4219				1980.97	1982.3	1980.3	
I-733	4261				1980.97	991.8	1980.3	
I-734	370				1980.97	991.7	1980.4	
I-735	246				1980.97	991.7	1980.3	

I-736	440				1952.938	991.7	1980.3	
I-737	353				1952.938	991.7	1980.3	
I-738	63				1947.923	1949.5	1947.3	
I-739	53				1947.923	1949.6	1947.3	
I-740	376				1989.97	1991.7	1989.3	
I-741	226				1989.97	1991.6	1989.4	
I-742	159				1989.97	1991.7	1989.4	
I-743	85				1961.939	1963.7	1961.3	
I-744	112				1876.886	1878.5	1876.2	
I-745	80				1876.886	1878.5	1876.2	
I-746	5000				1890.901	1892.6	1890.3	
I-747	2388				1890.901	1892.6	1890.3	
I-748	54				1840.875	921.7	1840.3	
I-749	40	9.0			1840.875	921.7	1840.2	
I-750	43	7.4			1826.859	914.7	1826.2	
I-751	29	7.1			1826.859	914.6	1826.1	
I-752	16	9.9			1853.87	928.1	1853.2	
I-753	14	10.0			1853.87	928.1	1853.2	
I-754	115				1840.875	921.6	1840.1	
I-755	88				1840.875	921.6	1840.1	
I-756	56				1826.859	914.6	1826.1	
I-757	64				1853.87	928.1	1853.1	
I-758	47				1853.87	928.1	1853.1	
I-759	1534				1840.875	1842.2	1840.1	
I-760	608				1840.875	1842.3	1840	
I-761	5				2027.841	2029.1	2027	
I-762	5	14.0	7.9		2027.841	2029	2027	
I-763	5	21.3			1930.827	1932.1	1930	
I-764	14	30.9			1930.827	1932	1930	
I-765	228				1918.827	1920.1	1918	
I-766	55				1918.827	1920.1	1918	
I-767	12	37.2			1930.827	1932.1	1930	
I-768	9	31.4			1930.827	1932.1	1930.1	
I-769	5	13.0			2036.841	2038.4	2036.1	
I-770	5	13.7			2036.841	2038.4	2036.1	
I-771	5	37.3			1939.827	1941.5	1939.1	
I-772	7	>>20			1939.827	1941.4	1939.1	
I-773	167				1927.827	1929.4	1927	
I-774	38				1927.827	1929.5	1927.1	
I-775	6	>>20			1939.827	1941.4	1939.1	
I-776	5	45.7			1939.827	1941.4	1939.1	
I-777	5	19.8			1919.855	1921.6	1919.4	
I-778	8	11.2			1916.811	1918.3	1916.3	

I-779	5	18.7			1925.812	1927.6	1925.2	
I-780	9	20.7			1940.865	1942.3	1940.2	
I-781	5	31.0			1949.866	1951.5	1949.2	
I-782	6	12.2			1933.871	1935.6	1933.2	
I-783	7	6.2			1944.816	973.9	971.8	
I-784	6	14.5			1953.816	1955.9	1953.7	
I-785	6	21.6			1788.753	895.5	1787.9	
I-786	8	29.3			1802.768	902.5	1801.9	
I-787	5	30.7			1916.811	1918	1915.9	
I-788	5	21.6			1925.812	1927.4	1924.9	
I-789	19	>>20			1919.855	1921.2	1918.8	
I-790	24	>>20			1919.855	1921.2	1918.8	
I-791	310				1942.812	1944.8	1943.3	
I-792	20	>>20			1908.851	1910.4	1908	
I-793	14	>>20			1975.827	1977.4	1975.1	
I-794	19	26.4			1969.871	1971.4	1969	
I-795	176				1969.871	1971.4	1968.8	
I-798	106				1942.812	1844.8	1942.3	
I-799	92				1922.866	1924.3	1921.9	
I-800	79				1926.841	1928.3	1925.9	
I-801	7	5.8	4.3	>20	1915.852	1917.1	1915	
I-802	6	4.8			1924.853	1926.4	1924	
I-803	5	9.6	9.0		1903.816	1905	1903	
I-804	5	13.5			1912.816	1914.4	1911.9	
I-805	5	18.5			1959.854	1961.2	1959	
I-806	5	21.6			1968.854	1970.4	1968	
I-807	5	3.2			1949.837	1951.1	1949	
I-808	5	4.4			1958.837	1960.4	1958	
I-809	5	6.1	11.3		1903.816	1905	1902.9	
I-810	6	18.0			1912.816	1914.4	1911.9	
I-811	32	>>20			1917.807	1919.2		
I-812	33	48.6			1923.763	1925.2		
I-813	7	20.9			1925.812	1927.4		
I-814	7	18.9	16.5		1889.8	946.1		
I-815	5	15.4	10.3		1875.785	939.1		
I-816	5	13.7			1902.796	1904		
I-817	10				1889.8	946		
I-818	6	15.0			1902.796	1904		
I-819	5	7.5			1987.848	1989	1987	
I-820	6	18.2			1996.849	1998.4	1996	
I-821	5	9.1			1973.833	1975.1	1973	
I-822	6	6.3	7.2		1987.848	1989	1987	
I-823	5	18.3			1996.849	1998.4	1996	

I-824	7	14.7			1973.833	1975.1	1973	
I-825	15	27.5			2001.864	2003	2001	
I-826	15	22.7			2001.864	1002.1	2001	
I-827	13	>>20			2010.864	2012.4	2010	
I-828	13				2010.864	1006.7	2010	
I-829	15	30.2			1987.848	1989.1	1987	
I-830	15	38.5			2001.864	1002.2	2001	
I-831	11	25.6			2001.864	1002.2	2001	
I-832	9	39.8			2010.864	2012.3	2010	
I-833	8	48.1			2010.864	2012.3	2010	
I-834	14	33.7			1987.848	1989.1	1987	
I-835	11	37.6			1987.848	1989	1987	
I-836	11	16.9			1915.827	1917.1	1915	
I-837	5	23.8			1924.828	1926.4	1924.1	
I-838	12	17.4			1929.843	1931.1	1929.1	
I-839	7	41.9			1938.843	1940.4	1938.9	
I-840	16	22.3			1958.87	1960.2	1958.1	
I-841	12	34.4			1967.87	1969.4	1967.1	
I-842	34	47.9			1964.848	1966.1	1964	
I-843	154				1973.848	1975.5	1973.1	
I-844	6				1902.832	1904.1	1902.1	
I-845	7				1911.832	1913.5	1911	
I-846	56				1914.868	1916.1	1914.1	
I-847	28	>>20			1923.869	1925.5	1923.1	
I-848	13	7.0			2060.866	2061.9	2059.9	
I-849	8	3.6	1.1	9.2	2026.882	1014.6	2026	
I-850	26	16.4			2025.868	1014.1	2025.1	
I-851	16	7.6			1991.884	997.1	1991	
I-852	7	2.8	1.4		2025.868	1014.1	2025.1	
I-853	8	6.6			2025.868	1014.1	2025.1	
I-854	8	3.6			1991.884	997.1	1991	
I-855	22				1948.853	1949.9	1947.9	
I-856	17	6.8			1914.868	1916	1914	
I-857	15	30.6			1787.769	1788.9	1787	
I-858	34	>>20			1801.784		1800.9	
I-859	36	>>20			1774.774		1773.9	
I-860	61				1774.774		1773.9	
I-861	40				1830.811		1829.9	
I-862	123				1786.81		1785.9	
I-863	22	>>20			1810.785	1940	1937.9	
I-864	12	40.0			1938.843	1812	1809.8	
I-870	9.5	14.6			2129.923	2131	2128.8	
I-871	5	13.7			2129.923	1917.7	1915.7	

I-872	9.5	14.1			2129.923	2130.7	2128.8	
I-873	6.5	10.0			2129.923	2131	2128.8	
I-874	18.5	14.6			2086.953	1044.6	2085.8	
I-875	26	13.7			2086.953	2087.8	2085.8	
I-876	24	13.2			2086.953	2087.7	2085.8	
I-877	11	15.6			2086.953	2088	2085.8	
I-881	10	23.8			2015.916	1009.2	1007	
I-882	22	41.4			2015.916	1009.1	1007.1	
I-883	53				2241.901	1122.1	1120.1	
I-884	14	>>20			2155.942	1079.1	1077.1	
I-885	32	>>20			2181.958	1092.1	1090.1	
I-886	22	>>20			2100.933	1051.6	1049.5	
I-887	14	>>20			2113.964	1058.1	1056.1	
I-888	13				2182.027	1092.1	1090.1	
I-889	16	>>20			2189.995	1096.2	1094.1	
I-890	16	>>20			2176.964	1089.6	1087.6	
I-891	13				2134.953	1068.6	1066.6	
I-892	18	>>20			2103.932	1053	1051	
I-893	834				2103.932	1053.6	1051.6	
I-894	15	>>20			2191.985	1097.1	1095	
I-895	14	>>20			2280.037	1141.1	1139.1	
I-896	22	>>20			2368.089	1185.2	1183.1	
I-897	16	>>20			2043.911	1023.1	1021	
I-898	16	>>20			2099.974	1051.1	1049.1	
I-899	28	>>20			2135.974	1069.1	1067.1	
I-900	33	>>20			2178.021	4090.1	1088.1	
I-901	38				2164.005	1083.1	1081.1	
I-902	104	21.2			2312.939	1157.5	1155.4	
I-903	33	7.8			2226.979	1114.6	1112.6	
I-904	54	20.0			2252.995	1127.6	1125.6	
I-905	8	31.6			2171.97	1087.1	1085	
I-906	8	26.5			2185.001	1093.7	1091.6	
I-907	9	27.8			2253.064	2254.2	2252.1	
I-908	10	26.0			2261.033	2262.1	2260.2	
I-909	8	28.4			2248.001	2249.1	2247.4	
I-910	10	29.8			2205.99	1104.1	1102.1	
I-911	12	22.9			2174.969	1088.6	1086.6	
I-912	10	28.0			2263.022	1132.7	1130.6	
I-913	10	26.4			2351.074	1176.7	1174.6	
I-914	16	38.1			2439.127	1220.7	1218.7	
I-915	28	15.5			2198.948	1107.6	1105.6	
I-916	28	13.6			2198.948	1107.6	1105.6	
I-917	12	19.7			2114.948	1058.6	1056.6	

I-918	33	11.1			2171.011	1086.7	1084.6	
I-919	28	15.2			2207.011	1104.7	1102.6	
I-920	117	17.7			2249.058	1125.7	1123.6	
I-921	8				2055.846	1029.2	1027.3	
I-922	12	2.7			2042.85	1022.7	1020.6	
I-923	27	6.0			2088.871	1045.7	1043.8	
I-924	7	3.3			2099.795	1051.5	1049.6	
I-925	21	20.0			2055.846	1029.3	1027.2	
I-926	43	29.9			2055.846	1029.2	1027.3	
I-927	11	8.2			2089.872	1046	1044	
I-928	21	6.1			2089.872	1046	1044.1	
I-929	23	10.3			2012.876	1007.7	1005.7	
I-930	37	13.5			1999.881	1001.3	999.3	
I-931	221				2045.902	1024	1022	
I-932	35	11.4			2056.826	1030	1027.9	
I-933	168	22.2			2012.876	1007.8	1005.6	
I-934	69	19.2			2046.902	1024.6	1022.6	
I-935	8	33.1			2154.943	1078.6	1076.5	
I-936	7	22.2			2198.969	1100.6	1098.6	
I-937	9	28.8			2242.996	1122.6	1120.6	
I-938	9	33.5			2287.022	1144.6	1142.6	
I-939	8	25.1			2044.906	1023.6	1021.7	
I-940	1742				1986.814	1987.7	1985.7	
I-941	2111				1986.814	1987.8	1985.8	
I-942	1285				2000.83	2001.7	1999.8	
I-943	1994				2000.83	2001.8	1999.8	
I-944	761				1970.819	1971.8	1969.8	
I-945	1079				1970.819	986.5	984.5	
I-946	798				2012.866	2013.9	2011.9	
I-947	1053				2012.866	1007.5	1005.5	
I-948	2433				2000.83	2001.8	1999.7	
I-949	2256				2000.83	2001.8	1999.8	
I-950	1634				2000.83	2001.7	1999.7	
I-951	1471				2000.83	2001.8	1999.8	
I-952	1214				2062.846	2063.8	2061.8	
I-953	1456				2062.846	1032.6	1030.5	
I-954	900				1959.803	981.1	979	
I-955	1198				1959.803	981	979	
I-956	1086				1973.819	988	986	
I-957	1426				1973.819	988	986	
I-958	606				1973.819	988.1	986	
I-959	881				1973.819	988	986	
I-960	336				1985.856	994	992	

I-961	357				1985.856	994.1	992.1	
I-962	407				2019.84	1011.1	1009	
I-963	402				2019.84	1011.1	1009	
I-964	1435				1973.869	988.1	986.1	
I-965	1780				1973.869	988.1	986.1	
I-966	2023				1946.858	974.6	972.5	
I-967	1735				1946.858	974.6	972.5	
I-968	2981				1960.874	981.6	979.5	
I-969	2318				1960.874	981.7	979.5	
I-970	1364				2006.895	1004.6	1002.5	
I-971	1842				2006.895	1004.7	1002.6	
I-972	1819				1972.91	987.6	985.7	
I-973	9	19.0	10.1		1972.91	987.7	985.6	
I-974	1780				1905.832	954.1	952	
I-975	2236.5				1905.832	954.1	952	
I-976	399				1992.843	997.6	995.5	
I-977	875.5				1992.843	997.6	995.6	
I-978	112				1965.832	984.1	982.1	
I-979	240				1965.832	984.1	982	
I-980	221				1979.847	991.1	989	
I-981	373.5				1979.847	991.1	989	
I-982	190				1984.842	993.6	991.7	
I-983	118				1984.842	993.6	991.5	
I-984	179				1924.805	963.5	961.5	
I-985	430.5				1924.805	963.6	961.4	
I-986	136				1950.857	976.6	974.7	
I-987	112				1950.857	976.6	974.5	
I-988	5	13.9			2054.91	2055.7	2053.6	
I-989	87				2070.905	1036.5	1034.4	
I-990	41	8.8			2047.844	1025.2	1023.1	
I-991	51				2061.86	1032.2	1030.2	
I-992	59				2061.86	1032.2	1030.2	
I-993	18	4.9	1.8	3.6	2015.839	1009.2	1007.4	
I-994	121				2011.917	2013	2011	
I-995	55				1985.865	994.2	992.1	
I-996	21	11.3	3.6		1999.881	1001.2	999.2	
I-997	154				1984.906	994	992	
I-998	127				1958.854	980.7	978.8	
I-999	26	26.3	5.6		1958.854	980.7	978.6	
I-1000	18	23.9	1.9		1972.87	987.7	985.5	
I-1001	7218				2027.841	1015	1013	
I-1002	9	29.8			2097.892	1050.2	1048.3	
I-1003	38				2131.877	1067.2	1065.2	

I-1004	5	10.6			2071.84	1037.2	1035.1	
I-1005	42				2097.892	1050.2	1048.2	
I-1006	5	>>20			2112.903	1057.7	1055.6	
I-1007	6	24.9			2097.892	1050.2	1048.2	
I-1008	9	14.0	4.7		2131.877	1067.2	1065.2	
I-1009	11	33.3			2071.84	1037.2	1035.1	
I-1010	8	13.3			2097.892	1050.3	1048.2	
I-1011	5	20.8			2112.903	1057.7	1055.7	
I-1012	60	37.9			2187.976	1095.3	1093.2	
I-1013	8	12.4			1931.821	967.2	964.9	
I-1014	19	14.3			1930.837	966.7	964.6	
I-1015	5	8.9	5.7		1890.794	946.6	944.4	
I-1016	8	21.4			1889.81	946.2	944.2	
I-1017	5	8.9			1917.805	960.2	958.2	
I-1018	26	25.8			1916.821	959.7	957.7	
I-1019	5	9.6	7.8		1876.779	939.7	937.8	
I-1020	52				1875.794	939.2	937.2	
I-1021	5	11.5			1915.85	959	957	
I-1022	33	13.7			1914.866	959.8	956.5	
I-1023	10	15.0			1874.824	938.5	936.5	
I-1024	43				1873.84	938	935.9	
I-1025	5	23.6			1917.795	960.1	958	
I-1026	5	16.7			2028.825	1015.6	1013.6	
I-1028	13	8.7	3.6		1917.805	960.2	958.2	
I-1029	823	>>20			1931.821	967.2	965.1	
I-1030	507	>>20			1931.821	967.2	965.1	
I-1031	11	8.8			1931.821	967.2	965	
I-1032	15	10.4			1890.794	946.7	944.5	
I-1033	10	8.6			1904.81	953.7	951.7	
I-1034	27	9.5	4.0		1950.831	976.7	974.6	
I-1035	21	10.2			1916.846	959.7	957.5	
I-1036	29	16.6			1904.81	953.7	951.7	
I-1037	30	4.4			1918.825	960.7	958.7	
I-1038	101				1964.846	983.7	981.6	
I-1039	57				1930.862	966.7	964.5	
I-1040	8	9.3			1970.832	986.7	984.8	
I-1041	8	>>20			1964.785	983.7	981.6	
I-1042	5	11.4			1957.836	980.2	978.2	
I-1043	12	>>20			1951.789	977.2	975.2	
I-1044	5	17.6	14.5		1943.821	973.2	971.3	
I-1045	5	23.9			1937.774	970.2	968.2	
I-1046	5	20.5			1929.805	966.2	964.1	
I-1047	5	28.4			1923.758	963.2	961	

I-1048	5	8.8			1916.81	959.7	957.6	
I-1049	6				1910.763	956.6	954.5	
I-1050	5	24.8			1902.794	952.7	950.5	
I-1051	14	>>20			1896.747	949.6	947.5	
I-1061	6	10.3			2141.955	1072.5	1070.2	
I-1062	11	4.7			1943.857	973.3	971.2	
I-1063	471				1957.873	911.7	909.7	
I-1064	414				1902.831	952.7	950.5	
I-1065	520				1902.831	952.6	950.5	
I-1066	789				1916.846	959.7	957.7	
I-1067	517				1916.846	959.7	957.5	
I-1068	950				1916.846	959.7	957.4	
I-1069	920				1916.846	959.7	957.8	
I-1070	1022				1930.862	966.7	964.7	
I-1071	1261				1930.862	966.8	964.7	
I-1072	10	10.5			1909.896	956	953.8	
I-1073	409				1923.912	963.1	961	
I-1074	498				1923.912	963.1	961	
I-1075	567				1969.873	986.2	984.4	
I-1076	448				1969.873	986.3	984.2	
I-1077	324				1983.888	993.3	991.3	
I-1078	352				1983.888	993.3	991.4	
I-1079	5	19.7			1972.847	987.8	985.8	
I-1080	6	>>20	10.4		1916.846	959.8	957.7	
I-1081	5	16.7	10.6		1874.799	1876.3	1874.2	
I-1082	5	14.1			1904.81	1906.3	1904.2	
I-1083	8	18.8			1950.831	976.9	975	
I-1084	368				1900.815	951.9	949.8	
I-1086	12	10.1			1888.851	1890.3	1888.3	
I-1087	9	9.3			1888.851	1890.3	1888.4	
I-1088	22	6.3			1902.867	1904.3	1902.4	
I-1089	12	8.9			1902.867	1904.3	1902.5	
I-1090	18	6.1			1861.84	1863	1861	
I-1091	27	11.4			1875.856	1877	1875	
I-1092	26	7.7			1861.84	1863	1861	
I-1093	43				1875.856	1877	1875	
I-1094	46				1875.856	1877	1875	
I-1095	15	>>20			1900.888	1902	1900	
I-1096	17	8.6			1914.903	1916.4	1914.4	
I-1097	40	>>20			1873.877	1875	1873	
I-1098	100				1887.892	945	943	
I-1099	9	9.0			1842.817	922.6	920.5	
I-1100	16	24.3			1868.833	935.6	1868.2	

I-1101	14	27.0			1860.808	931.6	929.6	
I-1102	16	27.2			1886.824	944.6	942.6	
I-1103	15	16.7			1872.828	937.6	935.6	
I-1104	10	17.7			1898.844	950.6	948.7	
I-1105	36	>>20			1848.864	925.7	923.6	
I-1106	23	>>20			1848.864	925.6	923.6	
I-1107	18	11.8			2009.904	1006.4	1004.5	
I-1108	18	>>20			1987.789	995.3	993.3	
I-1109	24	>>20			1987.789	995.4	993.4	
I-1110	38	>>20			2013.841	1008.4	1006.1	
I-1111	28	>>20			2013.841	1008.5	1006.1	
I-1112	40				1928.846	965.9	963.8	
I-1113	64				1968.877	986	984	
I-1114	20	>>20			1960.779	981.8	979.9	
I-1115	28	24.3			1960.779	981.8	979.9	
I-1116	40				1972.815	987.9	986	
I-1117	55				1972.815	987.9	985.8	
I-1118	24	29.5			1973.831	988.4	986.3	
I-1119	26	19.4			2011.808	1007.3	1005.3	
I-1120	85	>>20			2011.808	1007.4	1005.3	
I-1121	18	9.2			1973.868	988.4	986.1	
I-1122	34	12.3			2011.844	1007.4	1005.4	
I-1123	64	28.5			2011.844	1007.4	1005.5	
I-1124	12	>>20			1939.87	971.2	969.2	
I-1125	16	>>20			1977.847	990.2	988.2	
I-1126	32	26.8			1977.847	990.2	988.2	
I-1127	18	5.4			1939.907	971.2	969.2	
I-1128	20	8.1			1977.883	990.2	988.2	
I-1129	39				1977.883	990.2	988.1	
I-1130	6	7.6			1986.899	1988.7	1986.7	
I-1131	7	18.8			2043.921	2045.7	2043.8	
I-1132	21	>>20			2043.921	2045.7	2043.5	
I-1133	5				1972.847	1974.8	1973.4	
I-1134	6				1972.847	1974.8	1972.6	
I-1135	20				1916.81	959.8		
I-1136	16	14.9			1916.81	959.8	957.7	
I-1137	8	12.0			1916.81	959.8	1916.7	
I-1138	18	19.8			1928.846	1953.4	1929.5	
I-1139	22	18.0			1942.862	972.9	1942.8	
I-1140	33	32.5			1942.862	972.9	1943.5	
I-1141	13	27.3			1910.763	956.8	1911.3	
I-1142	22	>>20			1910.763	956.8	1911.3	
I-1143	12	33.1			1910.763	956.7	1911.4	

I-1144	28	32.8			1922.799	962.9	1922.9	
I-1145	18	30.6			1936.815	969.8	1936.5	
I-1146	33	>>20			1936.815	969.8	1935.6	
I-1147	10	21.1			1985.868	994.3	1986.5	
I-1148	50	21.5			1985.868	994.2	1986.3	
I-1149	70				2027.915	1015.4	2027.7	
I-1150	12	21.4			1958.857	980.8	978.6	
I-1151	30	25.3			1958.857	980.8	978.9	
I-1152	65	14.2			2000.904	2003	2001	
I-1153	12	>>20			1979.821	991.3	989.1	
I-1154	45				1979.821	991.3	989.4	
I-1155	60				2021.868	1012.3	1010.6	
I-1156	14	26.1			1952.81	977.8	975.9	
I-1157	36	>>20			1952.81	977.8	1953.2	
I-1158	168				1994.857	998.9	1995.2	
I-1159	61				1930.827	1932.2	1930.3	
I-1160	575				1930.827	1932.3	1930.4	
I-1161	24	>>20			2041.857	2043.2	2041.3	
I-1162	1534				2041.857	2061.4		
I-1163	691				1887.858	1889.2	1887.3	
I-1164	162				1887.858	1889.2	1887.2	
I-1165	722				1887.858	1907.2		
I-1166	14	14.6			1889.837	1891.1	1889.2	
I-1167	34	11.7			1901.873	1903.2	1901.2	
I-1168	25	31.4			1917.841	960.3	958.3	
I-1169	159				1929.878	1931.6	1929.6	
I-1170	15	13.5			1848.81	925.6	923.7	
I-1171	70	28.8			1860.847	931.6	1860.2	
I-1172	45	19.4			1888.851	939.8	937.7	
I-1173	12	17.2			1915.852	959.2	1915.2	
I-1174	43	32.6			1927.889	965.2	1927.2	
I-1175	24	27.3			1943.857	973.3	971.5	
I-1176	169				1955.893	979.2	977.3	
I-1177	25	4.3			1929.868	1931.4	1929.4	
I-1178	54.5	28.8			1929.868	1931.3	1929.4	
I-1179	346				1943.884	1945.3	1943.4	
I-1180	87				1943.884	1945.2	1943.3	
I-1181	297	>>20			1849.806	1851.2	1849.3	
I-1182	144.5				1850.764	1852	1850.1	
I-1183	409				1878.769	940.8	938.8	
I-1184	175.5				1850.763	926.7	924.8	
I-1185	203	26.9			1999.849	1001.1	999.1	
I-1186	127.5	23.6			2000.808	1001.6	999.6	

I-1187	80.5	28.6			1972.802	987.6	985.5	
I-1188	22.5	7.2			1872.883	1874.1	1872.2	
I-1189	94.5				1859.861	931	1860	
I-1190	58.5				1831.857	917	1832	
I-1191	38.5				1845.872	924	1845	
I-1192	81.5				1910.883	957	955	
I-1193	78.5				1882.879	1884	1882	
I-1194	66.5				1909.888	1911.6	1909.6	
I-1195	29.5	16.2			1881.883	1883.5	1881.2	
I-1196	85				1873.877	1898	1874	
I-1197	44				1845.872	1869	1845	
I-1198	65				1900.888	952	950	
I-1199	44.5				1872.883	1874	1872	
I-1200	99	>>20			1940.848	971.7	969.6	
I-1201	13	19.6			1940.848	971.7	969.7	
I-1202	16	16.3			1940.848	971.7	969.6	
I-1203	16	10.0			1934.891	1936.3	1934.4	
I-1204	81				1934.891	1936.2	1934.2	
I-1205	987				1934.891	1936.2	1934.2	
I-1206	32	27.8			1915.827	959.2	957.1	
I-1207	40	7.5			1914.868	958.7	1914.3	
I-1208	349				1888.816	945.7	1988.1	
I-1209	479				1887.858	1889.2	1887.3	
I-1210	56				1929.843	966.2	1929.2	
I-1211	115				1928.884	1930.2	1928.3	
I-1212	8663				1914.868	1916.2	1914.2	
I-1213	10000				1913.91	1915.3	1913.3	
I-1214	116				1902.832	1904.2	1902.2	
I-1215	216				1901.873	1903.2	1901.2	
I-1216	10000				1901.848	1903.4	1901.3	
I-1217	10000				1900.889	1902.3	1900.2	
I-1218	10	>>20			1952.778	1954.2	1952.2	
I-1219	7	>>20			2063.808	2065.2	2063.3	
I-1220	11	17.3			1915.827	1917.1	1915.2	
I-1221	14	23.4			1914.868	1916.3	1914.4	
I-1222	511				1888.816	945.7	943.7	
I-1223	550				1887.858	1889.3	1887.3	
I-1224	389				1929.843	1931.1	1929.1	
I-1225	305				1928.884	1930.3	1928.4	
I-1226	559				1914.868	958.8	956.7	
I-1227	10000				1913.91	1915.3	1913.3	
I-1228	100				1902.832	1904.2	1902.2	
I-1229	134				1901.873	1903.2	1901.3	

I-1230	10000				1901.848	952.3	950.3	
I-1231	10000				1900.889	1902.3	1900.2	
I-1232	31	43.3			1897.86	1899.2	1897.2	
I-1233	24	54.5			1897.86	1899.1	1897.2	
I-1234	41	23.9			1909.896	1911.2	1909.3	
I-1235	27	24.8			1909.896	1911.2	1909.3	
I-1236	69	20.9			1937.901	1939.7	1937.7	
I-1237	31	39.9			1937.901	1939.6	1937.6	
I-1238	44	23.1			1868.87	935.7	1868.2	
I-1239	33	31.8			1868.87	935.7	1868.2	
I-1240	33	11.5			2070.882	1037	1035	
I-1241	19	15.7			2002.844	1002.9	1000.9	
I-1242	30	>>20	3.8		1972.834	987.9	986	
I-1243	82				2014.881	2017	2015	
I-1244	18	17.7	15.9		1918.825	960.9	959	
I-1245	9	12.2	4.1		1891.815	947.4	945.8	
I-1246	13	24.3	16.2		1861.804	932.4	1862.5	
I-1247	33	>>20			1903.851	953.4	951.5	
I-1248	19	29.7			1971.888	987.5	985.5	
I-1249	17	25.2			1903.851	953.4	951.3	
I-1250	31	>>20			1873.84	938	936	
I-1251	1940				1915.887	957	959	
I-1252	546				2001.899	1002.5	1000.3	
I-1253	14	>>20			2005.857	1004.5	1002.4	
I-1254	530				1972.945	988	986	
I-1255	32	>>20			1976.904	989.9	987.7	
I-1256	1466				1903.789	932	930	
I-1257	11				2006.858	2008.3	2006.3	
I-1258	17	>>20			1953.772	978.4	976.4	
I-1259	10	18.1			1961.831	982.4	980.3	
I-1260	23	24.0			1924.818	964	961.9	
I-1261	31	19.8			1932.877	967.9	965.9	
I-1262	1124				1889.872	946.4	944.3	
I-1263	43	20.0			1842.854	922.7	920.6	
I-1264	157	>>20			1884.901	943.8	941.6	
I-1265	152	22.7			1884.901	943.7	941.8	
I-1266	755	>>20			1892.87	947.7	945.6	
I-1267	181	36.9			1892.87	947.7	945.8	
I-1268	198	28.4			1910.841	956.7	954.7	
I-1269	173	17.6			1892.87	947.7	945.8	
I-1270	3699				1892.87	947.7	945.7	
I-1271	682				1910.841	956.7	954.5	
I-1272	331				1836.897	919.7	917.7	

I-1273	9	>>20			2003.915	1003.6	1001.4	
I-1274	13	>>20			2015.951	2018.1	2016.4	
I-1275	9	27.8			2042.962	2045	2042.9	
I-1276	10	>>20			2015.951	2018.1	2015.9	
I-1277	17	>>20			2027.987	2029.9	2027.9	
I-1278	10	18.0			2000.915	2003.1	2001.6	
I-1279	12	22.9			1973.904	1976	1974.5	
I-1280	22	24.7			1985.94	1988.1	1985.9	
I-1281	10	22.2			2014.931	2017	2015.5	
I-1282	34	43.1			1987.92	995.6	993.6	
I-1283	26	38.6			1999.956	2002.1	1999.9	
I-1284	10000				1894.933	1896.5	1894.6	
I-1285	10000				1894.933	1896.4	1894.5	
I-1286	10000				1838.87	1840.3	1838.4	
I-1287	10000				1838.87	1840.3	1838.4	
I-1288	1164				1994.038	1995.7	1993.6	
I-1289	10000				1994.038	1995.5	1993.4	
I-1290	10000				1888.976	1890.3	1888.4	
I-1291	10000				1888.976	1890.2	1888.3	
I-1292	10000				1888.976	1890.3	1888.4	
I-1293	10000				1867.922	935.2	1867.3	
I-1294	10000				1894.933	1896.3	1894.3	
I-1295	10000				1838.87	1840.2	1838.2	
I-1296	3785				1838.87	1840.2	1838.3	
I-1297	10000				1994.038	1995.6	1993.4	
I-1298	10000				1888.976	1890.3	1888.3	
I-1299	10000				1867.922	935.2	1837.3	
I-1300	10000				1867.922	935.2	1867.3	
I-1301	10000				1893.949	1895.2	1893.3	
I-1302	45	21.4	4.0		1875.846	1877.2	1875.3	
I-1303	86	9.1			1909.831	1911.2	1909.2	
I-1304	31	33.6			1874.862	1876.3	1874.3	
I-1305	6	9.7			1863.81	1865.2	1863.2	
I-1306	6	6.6			1863.81	1865.2	1863.2	
I-1307	21	38.8			1929.867	1932	1930	
I-1308	25	11.9			1848.845	1851	1849	
I-1309	59	28.6			1877.835	1879.6	1877.6	
I-1310	124	>>20			1903.851	953.4	951.4	
I-1311	38	20.6			1937.835	1939.6	1937.5	
I-1312	14	16.1			1917.83	960.3	958.7	
I-1313	12	51.4			2002.956	2005.1	2003.6	
I-1314	9	>>20			1953.861	1955.2	1953.2	
I-1315	13	7.2			1952.902	1954.3	1952.3	

I-1316	11	6.8			1986.886	1988.3	1986.3	
I-1317	9	9.7			1978.842	1980.2	1978.2	
I-1318	14	4.8	3.9		1977.883	1979.1	1977.2	
I-1319	10	4.2	2.1		2011.868	2013.2	2011.3	
I-1320	10	26.2			1928.846	1929.2	1927.2	
I-1321	8	10.9			1927.887	1930.2	1928.3	
I-1322	11	9.1			1961.871	1963.2	1961.2	
I-1323	6	11.7			1988.765	1991.1	1989.2	
I-1324	14	5.8			1987.807	1990.5	1988.6	
I-1325	14	5.7			2021.791	2024.5	2022.7	
I-1326	12	6.2			1957.896	1959.5	1957.6	
I-1327	13	7.0			1939.907	1941.4	1939.6	
I-1328	11	5.4			1973.891	1975.5	1973.5	
I-1329	23	35.0			1916.902	1918.4	1916.5	
I-1330	104				1915.943	1917.5	1915.6	
I-1331	75				1949.927	1951.4	1949.5	
I-1332	11	2.5	0.9		2019.888	1011.5	1009.2	
I-1333	20	2.8	1.2		1978.862	991	1979.1	
I-1334	30	4.2	2.2		1979.882	991.4	1980.7	
I-1335	11	2.2	0.9	>20	2053.915	1028.3	1026.2	
I-1336	29	2.7	0.7		2012.888	1007.7	1005.8	
I-1337	85	6.2			2013.909	1008.3	1006.6	
I-1338	10	3.6	3.4		2053.873	1028.5	1026.7	
I-1339	33	5.2			2012.846	1008	1006.2	
I-1340	159	6.8			2013.867	1008.5	1005.9	
I-1341	17	3.5	3.2		2087.899	1045.3	1043.6	
I-1342	35	7.0			2046.873	1024.8	2046.5	
I-1343	150				2047.893	2049.6	2047.2	
I-1344	11	4.1			1915.852	1917.4	1915.4	
I-1345	15	4.7			1949.837	1951.4	1949.5	
I-1346	2319				1910.855	1912.4	1910.5	
I-1347	2369				1909.896	1911.4	1909.4	
I-1348	1181				1943.88	1945.4	1943.5	
I-1349	161				1924.871	1926.4	1924.4	
I-1350	158				1923.912	1925.4	1923.4	
I-1351	258				1957.896	1959.4	1957.5	
I-1352	12	19.5			1902.886	1904.4	1902.5	
I-1353	18	8.8			1901.927	1903.4	1901.4	
I-1354	48				1913.891	1915.3	1912.7	
I-1355	213				1926.911	964.7	1926.4	
I-1356	23	>>20			1905.828	954.2	1905.4	
I-1357	10	33.6			1886.844	944.7	1886.5	
I-1358	19				1980.97	1982.4	1980.5	

I-1359	88				1980.97	1982.4	1980.4	
I-1360	135				1993.99	998	996	
I-1361	39	>>20			1972.907	1974.4	1972.5	
I-1362	23	19.6			1953.922	1955.4	1953.5	
I-1363	9	5.5			2017.824	1010.2	2017.6	
I-1364	9	10.5			2017.824	2019.4	2017.5	
I-1365	9	9.7			2017.824	2019.4	2017.5	
I-1366	7	7.5			1977.841	1979.8	1977.9	
I-1367	31	7.8			2045.829	2047.8	2045.9	
I-1368	44	14.2			2045.829	2047.8	2046.6	
I-1369	29	9.9			2045.829	2047.8	2045.9	
I-1370	18	10.0			1977.818	1979.4	1977.5	
I-1371	22	10.9			1977.818	1979.4	1977.5	
I-1372	29	10.2			1977.818	1979.4	1977.6	
I-1373	5	18.3			1972.874	1974.6	1972.5	
I-1374	17	8.8			1998.89	2000.5	1998.5	
I-1375	7	18.5			1956.843	1958.5	1956.4	
I-1376	4208				1937.975	1939.7	1937.6	
I-1377	1003				1938.011	1939.6	1937.6	
I-1378	6171				1910.964	1912.7	1910.6	
I-1379	1435				1964.986	1966.7	1964.6	
I-1380	10000				1965.022	1966.6	1964.6	
I-1381	10000				1932.019	1933.7	1931.6	
I-1382	2853				1937.975	1939.6	1937.6	
I-1383	1655				1938.011	1939.6	1937.7	
I-1384	10000				1910.964	1912.5	1910.5	
I-1385	1082				1964.986	1966.8	1964.6	
I-1386	2248				1965.022	1966.6	1964.6	
I-1387	6938				1932.019	1933.6	1931.6	
I-1388	18	11.3			1854.89	1856.7	1854.8	
I-1389	9	9.2			1860.847	1862.6	1860.7	
I-1390	16	6.6			1820.841	1822.6	1820.6	
I-1391	11	35.0			1873.842	1875.5	1873.7	
I-1392	13	18.3			1860.847	1862.5	1860.6	
I-1393	34	18.6			1820.841	1822.5	1820.7	
I-1394	9	15.9			1901.847	1903.8	1901.8	
I-1395	33	15.4			1888.851	945.9	943.9	
I-1396	33	15.3			1935.873	1937.4	1935.5	
I-1397	48	16.4			1922.878	1924.4	1922.5	
I-1398	73				1882.871	1884	1882	
I-1399	13	17.4			1901.837	1903.4	1901.6	
I-1400	5	20.3			1901.837	1903.4	1901.5	
I-1401	5	21.4			1901.837	1903.4	1901.5	

I-1402	9	27.1			1895.88	1897.5	1895.5	
I-1403	6	29.1			1895.88	1897.4	1895.5	
I-1404	113	36.8			1895.88	1897.4	1895.5	
I-1405	9	40.1			1895.88	1897.4	1895.5	
I-1406	6	5.0			1977.868	1979.4	1977.5	
I-1407	5	4.2			1977.868	1979.5	1977.6	
I-1408	33	6.0			1977.868	1979.4	1977.6	
I-1409	74	24.0			1900.878	952	1901	
I-1410	80	29.3			1886.862	945	1987	
I-1411	109	47.1			1886.862	945	1987	
I-1412	79	>>20			1886.862	945	1987	
I-1413	74				1887.821	945.3	943.3	
I-1414	84	>>20			1860.81	931.8	929.8	
I-1415	72				1874.826	938.8	1874.4	
I-1416	57				1928.883	966	1929	
I-1417	198				1928.883	1953	1929	
I-1418	106	>>20			1914.867	959	1916	
I-1419	152				1914.867	959	1916	
I-1420	124				1914.867	959	1916	
I-1421	134				1914.867	1939	1916	
I-1422	388				1915.826	959.6	957.3	
I-1423	389				1888.815	946.1	1889.7	
I-1424	235				1902.831	953	1902.9	
I-1425	239				1895.862	1897.4	1895.5	
I-1426	203				1854.835	928.7	1854.4	
I-1427	33	30.4			1895.862	949.2	1895.4	
I-1428	41	40.2			1854.835	928.7	1854.5	
I-1429	10000				1919.902	961.3	1919.5	
I-1430	10000				1878.875	940.7	1878.4	
I-1431	44	14.6			1898.891	1900.4	1898.5	
I-1432	27	14.5			1857.865	930.2	1857.4	
I-1433	71				1912.907	1914.4	1912.5	
I-1434	83				1871.88	937.2	1871.5	
I-1435	90				1932.852	967.9	965.9	
I-1436	121				1891.826	947.4	945.6	
I-1437	7	7.1			1929.868	1931.5	1929.6	
I-1438	5	7.4			1943.884	1945.5	1943.5	
I-1439	349	>>20			1986.905	1988.6	1986.6	
I-1440	26	20.7			1928.884	1930.4	1928.5	
I-1441	327				1947.894	1949.5	1947.6	
I-1442	1500				1899.894	1901.5	1899.6	
I-1443	24	9.5			1887.858	945.3	1887.8	
I-1444	6558				1913.91	1945.6	1913.8	

I-1445	13	11.1			2044.91	2046.7	2044.8	
I-1446	9	35.2			2083.877	2085.8	2083.9	
I-1447	11	43.4			2063.889	2065.9	2064	
I-1448	20				2153.842	2155.8	2153.9	
I-1449	16	29.3			2153.842	2155.8	2153.9	
I-1450	11				2153.842	2155.8	2154	
I-1451	13	26.2			2015.889	2018	2016.1	
I-1452	66				1944.915	1946.6	1944.6	
I-1453	52				1944.915	1946.6	1944.5	
I-1454	22	26.8			2012.903	2014.5	2012.6	
I-1455	13	23.1			2012.903	2014.5	2012.6	
I-1456	16	23.7			1992.915	1994.4	1992.6	
I-1457	43	>>20			2011.856	2013.8	2011.8	
I-1458	26	18.1			1881.901			
I-1459	5				1939.827			
I-1460	7				1939.827			
I-1461	10	3.7	1.7		2026.882			
I-1462	8	2.3	2.7	8.4	1991.884			
I-1463	18				2042.85			
I-1464	168				1948.847	1950.8	1948.9	A
I-1465	10000				1994.038	1996.1	1994	
I-1466	10	2.2	0.7		2053.915			
I-1467	12	9.6			2066.985	1033.8	2065.1	
I-1468	233				1990.954	1990.4	1988.6	
I-1469	95				2275.135	2276.8	2274.9	
I-1470	57	>>20			2420.209			
I-1471	34	>>20			2120.999	2122.6	2120.7	
I-1472	12	>>20			2266.073	2267.7	2265.8	
I-1473	224				2331.198	1167	1165	
I-1474	41	>>20			2476.271	2478	2476.1	
I-1475	113				2177.062	2178.7	2176.9	
I-1476	16	>>20			2322.136	2324	2322.2	
I-1477	148				2402.235	2404	2402	
I-1478	75	17.1			2547.309	1275	1273	
I-1479	173				2248.099	2250	2248	
I-1480	37	9.3			2393.173	2394.9	2393	
I-1481	7	39.7			2028.937	2030.7	2028.6	
I-1482	7	18.0			2062.938	2064.7	2062.6	
I-1483	22	>>20			2028.9	2030.5	2028.5	
I-1484	30	>>20			2041.932	2043.7	2041.6	
I-1485	7	25.8			1986.89	1988.8	1986.5	
I-1486	5	17.9			2020.891	1988.4	1986.5	
I-1487	7	21.5			1986.853	2022.7	2020.6	

I-1488	6	30.3			1999.885	2001.6	1999.5	
I-1489	17	9.2			2062.954	2066.6	2064.6	
I-1490	226				1986.923	1990.3	1987.4	
I-1491	34				1848.845	1873	1849	
I-1492	5	7.3			1901.837	1903.5	1901.6	
I-1493	10	4.9			1874.826	1898.5	1874.6	
I-1494	5	14.7			1888.842	1912.4	1988.5	
I-1495	24	23.9			1886.862	1910.4	1886.5	
I-1496	51	9.4			1934.862	1958.4	1934.5	
I-1497	50	11.4			1973.873	1997.4	1973.5	
I-1498	48				1925.848	1949.4	1925.4	
I-1499	23	6.4			1888.842	1912.3	1888.4	
I-1500	22	4.7			1915.852	1917.3	1915.4	
I-1501	46	>>20			2028.937	2030.6	2028.6	
I-1502	34	>>20			2062.938	2064.7	2062.5	
I-1503	38				2041.968	2043.6	2041.6	
I-1504	46	>>20			2014.921	2016.6	2014.5	
I-1505	39	>>20			2048.923	2050.6	2048.7	
I-1506	89				2027.953	2029.6	2027.6	
I-1507	30	>>20			2028.9	2030.4	2028.5	
I-1508	87				2041.932	2043.6	2041.6	
I-1509	11	24.5			1935.821			
I-1510	10	31.8			1908.81			
I-1511	5	>>20			1951.816			
I-1512	12	>>20			1924.805			
I-1513	21	>>20			1875.785			
I-1514	27				1848.774			
I-1515	24	>>20			1889.8			
I-1516	30	>>20			1862.79			
I-1517	32	>>20			1902.796			
I-1518	23	24.2			1875.785			
I-1519	10	12.8			1941.868			
I-1520	11	17.4			1914.857			
I-1521	16	6.0			1881.901	1883.4	1881.4	
I-1522	6	5.8			1881.901	1883.3	1881.4	
I-1523	29	8.0			1866.927	1868.5	1866.6	
I-1524	17	8.1			1854.89	1856.3	1854.4	
I-1525	22	10.8			1854.89	1856.4	1854.5	
I-1526	84	>>20			1855.849	1857.3	1855.4	
I-1527	36	30.3			1855.849	1857.3	1855.4	
I-1528	102	31.4			1840.875	1842.4	1840.5	
I-1529	126	>>20			1828.838	1830.3	1828.4	
I-1530	61	36.9			1828.838	1830.4	1828.4	

I-1531	84	>>20			1882.86	1884.3	1882.4	
I-1532	49	>>20			1882.86	1884.4	1882.4	
I-1533	76	>>20			1867.885	1891.3	1867.4	
I-1534	181	>>20			1855.849	1879.3	1855.4	
I-1535	72	>>20			1855.849	1879.3	1855.4	
I-1536	42	18.4			1880.942	1882.4	1880.5	
I-1537	31	13.9			1868.906	1870.4	1868.5	
I-1538	21	11.8			1868.906	1870.4	1868.4	
I-1539	36	>>20			1896.876	1898.4	1896.4	
I-1540	17	42.4			1896.876	1898.4	1896.5	
I-1541	39	34.7			1881.901	1883.4	1881.5	
I-1542	64	49.1			1869.865	1871.4	1869.4	
I-1543	21	>>20			1869.865	1871.3	1869.4	
I-1544	61	>>20			1869.865	1871.3	1869.4	
I-1545	26	>>20			1869.865	1871.3	1869.4	
I-1546	71	37.9			1854.89	1856.4	1854.5	
I-1547	68	>>20			1842.854	1844.4	1842.5	
I-1548	28	>>20			1842.854	1844.3	1842.4	
I-1549	13	11.6			1915.885	1917.4	1915.5	
I-1550	22	15.3			1900.911	1902.4	1900.6	
I-1551	16	19.8			1888.875	1890.3	1888.4	
I-1552	56	>>20			1896.912			
I-1553	133	>>20			1881.938			
I-1554	63	>>20			1869.901			
I-1555	180	29.3			1914.843			
I-1556	385	>>20			1858.781			
I-1557	342	>>20			1913.884			
I-1558	678				1942.875			
I-1559	9683				1901.848			
I-1560	368				1928.859			
I-1561	2604				1887.832			
I-1562	5020				1913.884			
I-1563	2847				1913.884			
I-1564	122	>>20			1901.848			
I-1565	148	>>20			1901.848			
I-1566	231	>>20			1928.859			
I-1567	182	>>20			1928.859			
I-1568	7181				1963.864			
I-1569	2662				1963.864			
I-1570	1343				1913.884	1915.4	1913.5	
I-1571	15	11.7			2119.858	2121.8	2119.9	
I-1572	20	>>20			1973.842			
I-1573	16	>>20			1974.817	1976.3	1974.5	

I-1574	15	>>20			2010.784	2012.3	2010.5	
I-1575	79				1960.801	1962.3	1960.4	
I-1576	224				1938.763	1940.3	1938.4	
I-1577	45				1938.763	1940.3	1938.4	
I-1578	11	>>20			2016.865	1009.7	1007.8	
I-1579	39	>>20			2016.865	1009.7	1007.8	
I-1580	1427				2014.006			
I-1581	10000				2053.017			
I-1582	1223				1980.022			
I-1583	3421				1953.97			
I-1584	2436				1994.996			
I-1585	10000				1954.06			
I-1586	10000				2011.037			
I-1587	10000				2011.037			
I-1588	10000				1995.067			
I-1589	10000				1991.092			
I-1590	7520.5				1993.071			
I-1591	3114.5				2037.08			
I-1592	2850				2083.064	2085.1	2083.1	
I-1593	10000				2040.058	2041.9	2039.9	
I-1594	10000				2020.09	2021.9	2019.9	
I-1595	10000				2108.046	2109.8	2107.9	
I-1596	10000				1964.027	1965.8	1963.7	
I-1597	6989				1934.001	1935.7	1933.7	
I-1598	10000				1974.069	1975.7	1973.7	
I-1599	1075				2028.022	2029.8	2027.8	
I-1600	4290				2067.033	2068.8	2066.7	
I-1601	2018				1967.986	1969.7	1967.6	
I-1602	362	>>20			1994.996	1996.7	1994.7	
I-1603	10000				1974.069	1975.7	1973.7	
I-1604	123				2057.946	2059.8	2057.7	A
I-1605	214				2030.913	2032.5	2030.6	A
I-1606	107				2046.882	2032.5	2030.6	A
I-1607	49	11.9			2132.915	2135.1	2133	
I-1608	76	15.1			2143.979	2145.8	2143.6	
I-1609	15	6.7			2098.913	2101.2	2099.7	
I-1610	19	4.1			2109.977	2111.9	2109.6	
I-1611	10	9.8			2111.908	2114.1	2112	
I-1612	10	5.3	4.0		2122.973	2124.8	2122.6	
I-1613	9	5.2			2098.876	2100.9	2098.9	
I-1614	15	6.4			2109.941	2111.6	2109.6	
I-1615	9	8.0			2084.934	2087.3	2085.2	
I-1616	13	4.5	2.8		2095.998	2097.9	2095.6	

I-1617	759				1858.879			
I-1618	10000				1900.889	1902.4	1900.5	
I-1619	1292				1900.889	1902.4	1900.5	
I-1620	2057				1914.905	1916.4	1914.6	
I-1621	266				1888.853	1890.4	1888.5	
I-1622	13	>>20			2001.874			
I-1623	30	27.7			2029.905	1016.6	1014.7	
I-1624	47.5	42.9			2082.868			
I-1625	52.5	29.3			1998.887			
I-1626	721				1958.931	980.9	978.9	
I-1627	57	>>20			1930.9	1932.6	1930.5	
I-1628	18	>>20			1930.9	1932.6	1930.5	
I-1629	12	4.3	2.7		2054.913			
I-1630	11.5	5.0			2034.926			
I-1631	10	30.1			1958.895	1960.5	1958.6	
I-1632	10	6.5	2.6		2124.879	2126.4	2124.5	
I-1633	10	5.2			2040.898	2042.4	2040.5	
I-1634	9	16.5			2055.872			
I-1635	7	20.6			2035.885	2037.5	2035.6	
I-1636	17	>>20			1959.854	1961.5	1959.5	
I-1637	11	>>20			1959.854	1961.5	1959.5	
I-1638	9	14.5			2125.838	2127.4	2125.5	
I-1639	13	32.9			2125.838	2127.4	2125.5	
I-1640	8				2041.857	2043.4	2041.5	
I-1641		14.7			2083.904	2085.5	2083.7	
I-1642	36				2109.919	2111.5	2109.6	
I-1643	822				2021.085	2022.7	2020.7	
I-1644	10000				2020.09	2021.8	2019.7	
I-1645	940				2063.132	2064.8	2062.7	
I-1646	640				1994.038	1995.8	1993.6	
I-1647	2354				2057.012	2058.8	2056.6	
I-1648	191	>>20			2047.064	2048.8	2046.7	
I-1649	2482				2027.095	2028.8	2026.7	
I-1650	1683				2061.08	2062.9	2060.7	
I-1651	3968				2027.095	2028.9	2026.7	
I-1652	10000				2046.105	2047.9	2045.8	
I-1653	903				2078.106	2079.7	2077.7	
I-1654	2128				2120.19	2121.8	2119.9	
I-1655	48	12.7			2087.899	2089.7	2087.8	
I-1656	20	10.9			2053.915	2055.6	2053.6	
I-1657	36	11.0			2053.873	2056	2054.1	
I-1658	19	9.8			2019.888	2022.1	2020	
I-1659	108	11.4			2046.873	2070.4	2046.6	

I-1660	99				2012.888	2036.4	2012.6	
I-1661	70	8.3			2012.888	2036.4	2012.5	
I-1662	69	12.0			2012.846	2036.8	2013	
I-1663	67	8.5			1978.862	2002.8	1979.7	
I-1664	22	8.0			1984.842	2008.4	1984.6	
I-1665	17	9.7			1984.842	993.8	991.8	
I-1666	15	6.5			1950.857	976.7	967.7	
I-1667	13	5.6	1.3		1950.857	976.8	974.8	
I-1668	29	16.4			1985.862	994.3	992.3	
I-1669	30	11.8			1985.862	1987.5	1985.7	
I-1670	11	7.9			1951.878	1953.4	1951.6	
I-1671	28	8.0	1.7		1951.878	1953.5	1951.6	
I-1672	40	7.1			2047.92			
I-1673	28				2077.93	2080	2078.1	
I-1674	147	18.3			2153.962	2156	2154.1	
I-1675	18.5	9.7			2103.946	2106	2104.1	
I-1676	91				2119.977	2121.9	2120.1	
I-1677	17				2107.941	2110	2108	
I-1678	32	9.7			2054.913	1028.8	1026.9	
I-1679	17.5				2084.924	2086.6	2084.7	
I-1680	80.5	12.5			2160.955	2162.6	2160.7	
I-1681	18.5	5.4			2110.94	2112.5	2110.7	
I-1682	41				2126.971	2128.5	2126.6	
I-1683	9	3.7			2114.934	2116.7	2114.9	
I-1684	13	4.5	3.4		2005.873	2008	2006.5	
I-1685	23	3.5	1.3		2061.935	1032.5	1030.3	
I-1686	11	5.4	0.9/8.7		2033.904	2035.9	2034.1	
I-1687	42	18.6			2005.873	1004.4	1002.2	
I-1688	59	21.5			2047.92	1025.5	1023.7	
I-1689	25.5	12.5			2019.888	1011.5	1009.5	
I-1690	11				2028.835	1015.9	1013.9	
I-1691	11	12.8			2028.835	1015.9	1013.9	
I-1692	17	10.4			2084.897	1044	1042.2	
I-1693	10	4.6			2056.866	1029.9	1027.7	
I-1694	57	43.6			2028.835	2030.8	2028.8	
I-1695	93	>>20			2070.882	2072.9	2070.9	
I-1696	32	35.5			2042.85	1022.9	1021	
I-1697	179	>>20			2044.929	2046.7	2044.9	A
I-1698	165	>>20			1987.944	2032.6	2030.7	A
I-1699	533				2019.871	1011.5	1009.4	A
I-1700	16	4.8			2020.926	2022.6	2020.7	
I-1701	25	24.8			2021.921	2023.2	2021.4	
I-1702	17	6.9			2045.921	2047.5	2045.6	

I-1703	24	6.6			2012.957	1007.8	1005.9	
I-1704	37	5.3			2088.913	2090.3	2088.4	
I-1705	9	2.9			2012.866	2014.3	2012.4	
I-1706	24	4.8	2.7		1999.871	1001.3	999.3	
I-1707	19	6.1			2088.898	2090.4	2088.5	
I-1708	29	11.9			2088.898	2014.4	2012.4	
I-1709	14	6.2	3.9		2068.929	1035.8	1033.8	
I-1710	22	3.9	1.9		1969.861	986.2	984.3	
I-1711	232	33.3			2024.957	2026.4	2024.5	A
I-1712	597				2049.952	2051.4	2049.5	A
I-1713	498	>>20			2016.988	2018.4	2016.5	A
I-1714	372	28.6			2092.944	2094.4	2092.5	A
I-1715	95	38.4			2016.898	2018.4	2016.4	A
I-1716	224	21.7			2003.902	1003.3	1001.3	A
I-1717	249				2092.929	2094.4	2092.5	A
I-1718	382				2092.929	1047.8	1045.8	A
I-1719	187	27.6			2072.96	1037.8	1035.8	A
I-1720	212				1973.892			A
I-1721	139	>>20			1960.793	981		
I-1722	135	>>20			1960.793	1961.5		
I-1723	62				2113.818			
I-1724	551	29.7			2113.818			
I-1725	15	10.0			2034.941	2036.3	2034.4	
I-1726	274	>>20			2038.973	2040.4	2038.4	A
I-1727	28	34.1			1959.827	1961.8		
I-1728	14				1931.822	1933.5		
I-1729	9	23.0			1986.89	1988.5	1986.6	
I-1730	38				2040.861	2042.5	2040.6	
I-1731	25	29.5			1944.879	1946.5	1944.5	
I-1732	11	>>20			1945.838	1947.6	1945.5	
I-1733	15	>>20			1945.838	1947.5	1945.5	
I-1734	8				2091.853	2093.4	2091.5	
I-1735	667				1895.892	1897.3	1895.3	
I-1736	458				1901.848	1903.3	1901.4	
I-1737	518				1909.907	1911.3	1909.3	
I-1738	1058				1963.879	1965.3	1963.3	
I-1739	3655				1909.907	1911.3	1909.3	
I-1740	10000				1934.874			
I-1741	4393				1973.884	1975.3	1973.4	
I-1742	867				1773.789			
I-1743	469				1929.891	1931.5	1929.4	
I-1744	363				1920.858	961.7	959.7	
I-1745	402				1874.837			

I-1746	235				1887.832	1889.4	1887.3	
I-1747	187	>>20			2011.908	1007.3	1005.3	
I-1748	141	20.2			2011.908	1007.2	1005.3	
I-1749	145				2045.892	1024.2	1022.3	
I-1750	104	23.7			2045.892	1024.2	1022.3	
I-1751	104				1997.892			
I-1752	87				1997.892	1000.3	998.3	
I-1753	802				2015.939	1009.3	1007.3	A
I-1754	660				2003.902	1003.2	1001.3	A
I-1755	570				2049.923			A
I-1756	329				2037.887			A
I-1757	449				2001.923			A
I-1758	235				1989.887			A
I-1759	57	>>20			2111.012	2112.6	2110.6	
I-1760	32	>>20			2098.976	2100.6	2098.5	
I-1761	39	>>20			2144.997	2146.8	2144.8	
I-1762	13	>>20			2132.96	2134.7	2132.6	
I-1763	52	>>20			2096.997	2098.8	2096.8	
I-1764	23	>>20			2084.96	2086.6	2084.5	
I-1765	667				2115.044	2116.7	2114.7	A
I-1766	267				2103.007	2104.8	2102.8	A
I-1767	327				2149.028	2150.7	2148.6	A
I-1768	69	>>20			2136.992	2138.7	2136.6	A
I-1769	419				2101.028	2012.6	2010.6	A
I-1770	175	>>20			2088.992			A
I-1771	209				2054.913			
I-1772	14	6.8			2040.898	2042.3	2040.4	
I-1773	32	8.6			2040.898	2042.3	2040.4	
I-1774	28	8.9			2066.913	2068.3	2066.4	
I-1775	15				2052.898	2054.3	2052.4	
I-1776	17	10.5			2026.882	2028.2	2026.3	
I-1777	8	8.7			2012.866	2014.3	2012.4	
I-1778	2075				1816.82	909.7	907.7	
I-1779					1816.82			
I-1780	4192				1830.836			
I-1781	8452				1830.836			
I-1782					1943.884			
I-1783	101	>>20			1951.852	1953.3	1951.4	
I-1784	528				1963.889	1965.3	1963.4	
I-1785	31	42.3			1978.863	1980.4	1978.5	
I-1786	42	>>20			1965.868	1967.4	1965.6	
I-1787	776				1977.905	1979.6	1977.8	
I-1788	58	33.9			1987.864	1989.3	1987.4	

I-1789	183				1974.868	1976.3	1974.4	
I-1790	82	34.4			2038.806	2040.5	2038.6	
I-1791	182	>>20			2025.81	2027.3	2025.4	
I-1792	935				2037.847	2039.3	2037.4	
I-1793	20	>>20			1925.848	1927.5	1925.4	
I-1794	52	37.7			1925.848	1927.4	1925.4	
I-1795	28	22.8			1937.884	1939.5	1937.4	
I-1796	22	>>20			1937.884	1939.5	1937.4	
I-1797	10	22.5			2178.018	2179.9	2177.6	
I-1798	12				2178.018	2179.7	2177.6	
I-1799	8	25.8			2181.029	2182.6	2180.6	
I-1800	13	25.2			2181.029	2182.8	2180.9	
I-1801	7	17.5			2193.029	2191.7	2192.6	
I-1802	11	25.2			2193.029	2194.7	2192.6	
I-1803	20	7.4			2177.943	2179.5	2177.6	
I-1804	8	9.4			2123.971	2125.6	2123.5	
I-1805	6	9.3			2123.971	2125.7	2123.7	
I-1806	8777				1750.774	1752.3	1750.3	
I-1807	163	>>20			1750.774	1752.4	1750.4	
I-1808	90	14.0			1919.884	1921.4	1919.5	A
I-1809	1947				1752.789	1754.4	1752.4	A
I-1810	416				1851.821	1853.3	1851.4	A
I-1811	156	32.3			1878.919	1880.3	1878.4	
I-1812	181				1902.796	1904.3	1902.4	
I-1813	26	>>20			1902.796	1904.3	1902.4	
I-1814	189				1901.837	1903.4	1901.5	
I-1815	46	>>20			1901.837	1903.4	1901.4	
I-1816	235				1888.78	1890.4	1888.4	
I-1817	182				1888.78	1890.4	1888.4	
I-1818	236	>>20			1887.821	1889.3	1887.4	
I-1819	615				1859.826	1861.4	1859.4	
I-1820	422				1858.867	1860.4	1858.5	
I-1821	67	>>20			1906.827	1908.3	1906.4	A
I-1822	60	>>20			1905.868	1907.4	1905.5	A
I-1823	41	>>20			1892.811	1894.4	1892.5	A
I-1824	101	>>20			1891.852	1893.4	1891.4	A
I-1825	366				1863.858	1865.4	1863.4	A
I-1826	474				1874.764			
I-1827	308				1874.764	1876.3	1874.3	
I-1828	264	>>20			1873.806	983.9	982.1	
I-1829	668				1904.811	1906.4	1904.4	
I-1830	313				1903.852	1905.4	1903.5	
I-1831	1635				1878.796	1880.3	1878.3	A

I-1832	1110				1877.837	1879.3	1877.4	A
I-1833	26	6.9			2054.887	2056.9	2054.9	
I-1834	35	18.8			2048.942	2050.6	2048.6	
I-1835	34	31.9			1986.926	1988.5	1986.5	
I-1836	24				2016.9	2018.3	2016.4	
I-1837	19	18.5			2068.929	2070.5	2068.5	
I-1838	85	7.9			2138.895	2140.4	2138.5	
I-1839	21	14.6			2054.913	2056.5	2054.5	
I-1840	14	22.3			2000.905	2002.4	2000.5	
I-1841	76	>>20			1958.895	1960.5	1958.4	
I-1842	81				2071.979	2073.5	2071.5	
I-1843	32	9.5			2051.88	2053.3	2051.4	
I-1844	227				2051.88	2055.3	2053.5	
I-1845	30	6.3			2007.89	2009.3	2007.4	
I-1846	38	29.8			2100.856	2102.7	2100.8	
I-1847	56	26.2			2077.894	2079.7	2078.1	
I-1848	42	>>20			2068.841	2070.3	2068.4	
I-1849	19	8.8			1936.815	970	1937	
I-1850	17	3.8			1964.846	1875.3	1873.4	
I-1851	25	3.8			1962.867	982.9	1963.7	
I-1852	48	4.9			1891.83	947.4	1892.9	
I-1853	114	16.3			1977.878	990.4	1978.6	
I-1854					2074.926			
I-1855	849				2074.926	2076.5	2074.5	
I-1856					2115.952			
I-1857	4025				2115.952	2117.6	2115.5	
I-1858	1108				2116.936	2118.4	2116.4	
I-1859	1106				2116.936	2118.6	2116.5	
I-1860	512				2164.903	1083.8	1081.8	
I-1861	14	37.3			2108.91	2110.4	2008.3	
I-1862	10	19.3			2108.91	2110.4	2108.9	
I-1863	10	37.4			2149.937	2151.6	2149.5	
I-1864	14	>>20			2149.937	2151.5	2149.5	
I-1865	10	>>20			2150.921	2151.5	2149.5	
I-1866	26	>>20			2150.921	1076.4	1074.5	
I-1867	7	16.4			2150.921	2152.5	2150.6	
I-1868	12	39.6			2198.888	2200.5	2198.6	
I-1869	12				2198.888	1100.8	2198.6	
I-1870	1522				1895.892	1897.4	1895.4	
I-1871	1765				1895.892	1897.3	1895.4	
I-1872	1499				1895.892	1897.4	1895.4	
I-1873	1479				1895.892	1897.3	1895.4	
I-1874	10000				1851.923	1853.4	1851.4	

I-1875	10000				1851.923	1853.3	1851.4	
I-1876	1338				1884.887	1886.3	1884.4	
I-1877	1524				1884.887	1886.3	1884.3	
I-1878	458				1872.858	937.7	1872.4	
I-1879	567				1872.858	937.7	1872.4	
I-1880	868				1886.874	944.7	1886.4	
I-1881	743				1886.874	944.7	1886.4	
I-1882	397				1943.906	1945.7	1943.4	
I-1883	884				1943.906	1945.6	1943.4	
I-1884	249				1927.864	1929.4	1927.4	
I-1885	255				1927.864	965.3	1927.5	
I-1886	10000				1957.886	1959.8	1957.6	
I-1887	10000				1957.886	1959.6	1957.6	
I-1888	10000				1943.906	1945.6	1943.5	
I-1889	10000				1943.906	1945.6	1943.5	
I-1890	31	>>20			1957.886	1959.7	1957.4	
I-1891	40	>>20			1957.886	1959.4	1957.6	
I-1892	1418				1956.901	1958.6	1956.5	
I-1893					1956.901			
I-1894					1970.893			
I-1895					1956.877			
I-1896	75				1936.932	1938.6	1936.4	
I-1897					1922.916			
I-1898	22	10.9			1922.916	962.7	1922.5	
I-1899	28	5.1			1992.877	1994.8	1992.7	
I-1900	136	>>20			1992.877	998	1993	
I-1901	34	4.9			1994.857	997.9	1993.7	
I-1902	28	7.7			1994.857	998.9	997.1	
I-1903	14	6.4			1952.81	977.8	1953.5	
I-1904	15	4.2		>20	2005.873	1004.4	1002.2	
I-1905	20	9.7			2066.914	2069.1	2067.6	
I-1906	23	15.5			2062.919	2064.9	2063.6	
I-1907	23				2036.904	2039	2037.7	
I-1908					2006.893			
I-1909	29	>>20			2109.998	2111.8	2109.7	
I-1910	17	13.8			2076.915	2078.6	2076.6	
I-1911	38	>>20			2067.951	2069.9	2067.9	
I-1912	13	11.5			2067.915	1035.3	2067.6	
I-1913	119	17.5			2052.941	1027.8	2052.7	
I-1914	52	6.4			2024.909	1016.8	2024.7	
I-1915	11	20.2			2033.967	2035.8	2033.8	
I-1916	8	9.2			2000.884	2002.5	2000.5	
I-1917	13	37.7			1991.92	1993.7	1991.6	

I-1918	5	4.0	6.5		1991.884	997.3	1991.7	
I-1919	33	4.7			1976.909	989.7	1976.5	
I-1920	18	3.1	1.2		1948.878	975.7	1948.5	
I-1921	22				1998.926			
I-1922	457				2008.017	2009.8	2007.7	
I-1923	10000				2022.007	2023.6	2021.6	
I-1924	1606				2054.973	2057.2	2055.8	
I-1925	475				2064.018	2065.8	2063.6	
I-1926	417				2051.023	2052.7	2050.6	
I-1927	5136				2022.007	2023.6	2021.6	
I-1928	887				2054.973	2009.8	2007.7	
I-1929	74	>>20			2064.018	1995.8	1993.6	
I-1930	1565				2051.023	2065.7	2063.6	
I-1931	1558				2037.007	2052.8	2050.6	
I-1932	285				2008.017	2038.7	2036.6	
I-1933	154				1994.001			
I-1934	5				2147.91	2149.5	2147.4	
I-1935	9	7.1			2192.917	2194.3	2192.4	
I-1936	10	15.7			2196.004	2197.6	2195.5	
I-1937	9				2208.004	2209.6	2208.3	
I-1938	8	30.0			2187.941	2189.6	2187.4	
I-1939	10	20.7			2138.946	2140.5	2138.4	
I-1940	6	15.4			2192.993	2194.6	2192.6	
I-1941	6	12.9			2110.914	2112.5	2110.3	
I-1942	11	7.9			2131.904	2133.3	2131.4	
I-1943	7	3.8			2111.898	2113.2	2111.3	
I-1944	1634				1931.83			
I-1945	918				1931.83			
I-1946	874				1931.83			
I-1947	253				1931.83			
I-1948	1331				1945.845			
I-1949	96	28.5			1945.845			
I-1950	234				2084.854	1043.9	2084.6	
I-1951	264	>>20			2098.87	2100.4	2098.6	
I-1952	923	>>20			2083.859	1043.4	2082.8	
I-1953	306	>>20			2083.859	1043.3	2084.3	
I-1954	994	>>20			2083.859	2043.4	2041.6	
I-1955	1201				2083.859	2085.4	2083.3	
I-1956	849				2083.859	2085.3	2083.5	
I-1957	567				2097.875	2099.4	2097.4	
I-1958	1536	>>20			2097.875	2099.6	2097.5	
I-1959	412	>>20			2091.922			
I-1960	544	20.4			2091.922			

I-1961	2099	>>20			2091.922			
I-1962	1604	>>20			2091.922			
I-1963	326	25.6			2035.859	1019.3	1017.4	
I-1964	738				2035.859	2037.4	2034.6	
I-1965	633	25.2			2035.859	1019.3	2035.6	
I-1966	566				2049.875	2051.5	2049.6	
I-1967	14				1998.926			
I-1968	29				1998.926			
I-1969	49				1998.926			
I-1970	441				1873.806	1875.8	1873.4	
I-1971	475				1887.821	1889.8	1887.7	
I-1972	689				1887.821	1889.9	1887.8	
I-1973	797				1901.837	1903.9	1902	
I-1974	324				1877.837	1879.8	1877.9	A
I-1975	745				1891.852	1891.9	1889.9	A
I-1976	150				1905.868	1907.9	1905.9	A
I-1977	4283				1764.789	1766.3	1764.4	
I-1978	145	>>20			1764.789	1766.3	1764.4	
I-1979	10000				1736.758	1738.3	1736.3	
I-1980	236	>>20			1722.742	1724.3	1722.2	
I-1981	567				1766.805	1766.3	1764.4	A
I-1982	9663				1738.774	1738.3	1736.4	A
I-1983	186	>>20			1724.758	1724.3	1722.3	A
I-1984	320				2019.888	1011.5	2020	
I-1985	325				2033.904	1018.5	2033.9	
I-1986	502				2056.866	1029.9	1028.1	
I-1987	54				1920.843	1922.4	1920.6	A
I-1988	312				1863.821	1865.6	1863.8	
I-1989	186				1835.79	1837.4	1835.6	
I-1990	585				1821.774	1823.4	1821.6	
I-1991	397				1865.837	1867.4	1865.5	A
I-1992	536				1837.806	1839.4	1837.5	A
I-1993	728				1823.79	1925.8		A
I-1994	10000				1909.907	1911.4	1909.6	
I-1995	10000				1909.907	1911.4	1909.5	
I-1996	10000				1963.879	1965.4	1963.5	
I-1997	3394				1963.879	1965.2	1963.2	
I-1998	732				1929.853	1931.6	1929.8	
I-1999	4937				1929.853	966.4	1930	
I-2000	6560				1929.853	1932	1930.3	
I-2001	4454				1929.853	1931.8	1929.9	
I-2002	612				1845.785	1847.3	1845.4	
I-2003	1015				1845.785	1847.2	1845.2	

I-2004	227				2000.953	2002.8	2000.7	
I-2005	357				2000.953	2002.7	2000.5	
I-2006	285				2000.953	2002.8	2000.7	
I-2007	10000				1915.864	1917.5	1915.5	
I-2008	8825				1915.864	1917.4	1915.5	
I-2009	1480				1969.835	1971.4	1969.6	
I-2010	1973				1969.835	1971.4	1969.5	
I-2011	10000				1935.809	1937.8	1935.9	
I-2012	10000				1935.809	1937.7	1935.7	
I-2013	661				1935.809	1939.2	1937.3	
I-2014	1178				1935.809	969.8	967.4	
I-2015	522				1917.843	1920	1917.9	
I-2016	703				1917.843	1920	1918.1	
I-2017	2054				1916.811	1918.3	1916.4	
I-2018	1678				1916.811	1918.3	1916.4	
I-2019	1449				1915.852	1917.4	1915.4	
I-2020	1201				1915.852	1917.4	1915.5	
I-2021	5380				1920.843	1922.4	1920.4	A
I-2022	1895				1919.884	1921.4	1919.5	
I-2023	32	7.8			1920.82	962.3	1922.2	
I-2024	78	17.9			1948.851	976.4	974.2	
I-2025	109				1996.851	1000.4	998.3	
I-2026	26	9.7			1920.82	962.3	960.3	
I-2027	13	4.1			1936.815	970.3	968.1	
I-2028	32	17.6			1964.846	984.3	982.2	
I-2029	35	26.2			2012.846	1008.3	1006.2	
I-2030	22	3.9			1936.815	970.3	1938.2	
I-2031	11	4.7			1963.826	983.8	1964.2	
I-2032	16	20.9			1991.857	997.9	1991.6	
I-2033	30	9.5			2039.857	1021.9	1020	
I-2034	18				1963.826	983.8	981.9	
I-2035	16	14.5			1963.826	1966.4	1964.5	
I-2036	19	12.9			1963.826	983.8	981.5	
I-2037	17	5.0			2039.857	2042.6	2039.7	
I-2038	11	11.8			1979.821	991.8	989.7	
I-2039	9	10.5			1979.821	991.9	989.7	
I-2040	24	2.8		>20	2218.984	1111.5	1109.4	
I-2041	16	2.3	1.9	>20	2218.984	1111.4	1109.2	
I-2042	9	10.0			1935.821	1937.9	1936	
I-2043	8	2.8	1.0	15.2	1977.868	1980.1	1978.2	
I-2044	9	2.6		>20	2011.852	2014.1	2012	
I-2045	5	13.5			1951.816	1953.9	1951.9	
I-2046	12	2.9			2190.979	2193.2	2191.2	

I-2047	11	2.6	1.3		2190.979	2193.3	2191	
I-2048	91	28.8			2083.94	2085.5	2083.4	
I-2049	5	4.5			1977.868	1980.2	1978.1	
I-2050	9	4.9			1950.857	977.2	1951	
I-2051	16	8.3			1964.873	1967	1965	
I-2052	12	6.0			2025.868	2028.1	2025.8	
I-2053	11	5.0			1949.837	1952	1949.9	
I-2054	5	2.4			1977.868	1980.1	1978.1	
I-2055	13	10.5			2019.915	2022.2	2020.2	
I-2056	16	6.5			2033.931	1018.8	2034.3	
I-2057	17	1.5	4.0	>20	2053.915	1028.7	2054.1	
I-2058	10	3.9			2039.899	2041.9	2040	
I-2059	38	4.8			2012.888	2015.1	2013.1	
I-2060	56	9.6			2026.904	2029.2	2027.2	
I-2061	13	1.9	1.8		2026.856	2029.1	2027.1	
I-2062	41	3.0			2054.86	1029.4	1027.2	
I-2063	56	3.5			2088.886	2091.1	2089.1	
I-2064	16	11.8			2026.856	1015.2	2027.3	
I-2065	144	>>20			1991.002	1993.3	1991.1	
I-2066	357				1987.929	1990.2	1988.2	
I-2067	180	>>20			1978.929	1981.1	1979.3	
I-2068	338	>>20			2067.033	2069.3	2067.1	
I-2069	256	>>20			1957.919	1960.2	1957.9	
I-2070	190	>>20			1948.918	1951.1	1949.2	
I-2071	592				2027.964	2030.2	2018.1	
I-2072	8256				2027.964	2030.2	2028	
I-2073	398				1919.964	1922.2	1920.2	
I-2074	789				2026.969	2029.2	2026.9	
I-2075	2327				2026.969	2029.2	2027	
I-2076	16	14.1			2024.916	2026.5	2024.5	
I-2077	9	12.3	5.8		2052.948	2054.4	2052.6	
I-2078	5	11.7			2010.901	2012.4	2010.5	
I-2079	8	15.1			2038.932	2040.5	2038.5	
I-2080	45	28.8			2072.916			
I-2081	13	11.6			2072.916			
I-2082	5	7.7			2010.901	2012.5	2010.5	
I-2083	5	3.7			2038.932	2040.5	2038.6	
I-2084	5	9.2	9.7		1996.885	1998.4	1996.5	
I-2085	5	6.2			2024.916	2026.5	2024.6	
I-2086	12	16.4			2058.901			
I-2087	26	6.5			2021.906	2024.1	2022.1	
I-2088	10	4.4			1991.884			
I-2089	28	2.9			2053.915			

I-2090	11	5.9			1934.862			
I-2091	49	6.2			1996.893			
I-2092	15	4.4			2025.868			
I-2093	43	5.0			2087.899			
I-2094	28	9.7			1968.847			
I-2095	78	10.5			2030.878			
I-2096	79	>>20			1934.862			
I-2097	23	22.3			1934.862			
I-2098	260	>>20			1996.893			
I-2099	325				1996.893	1999	1997.1	
I-2100	86	>>20			1934.862	1637.1	1935.2	
I-2101	424				1996.893	1000.1	1996.9	
I-2102	273	>>20			2077.111			
I-2103	10000				1994.001			
I-2104	10000				2008.017			
I-2105	10000				2035.028			
I-2106	10000				2044.028			
I-2107	10000				2060.989			
I-2108	10000				2045.023			
I-2109	136	>>20			2057.023			
I-2110	88	>>20			2048.059			
I-2111	180	>>20			2034.007			
I-2112	501				2021.012			
I-2113	164				2048.023			
I-2114	32	>>20			2022.853			
I-2115	29	>>20			2022.853			
I-2116	19	33.4			2009.858			
I-2117	19	>>20			2009.858			
I-2118	21	>>20			1982.833			
I-2119	29	>>20			1982.833			
I-2120	11	37.2			1969.838			
I-2121	12	>>20			1969.838			
I-2122	12	34.4			1981.874			
I-2123	12	26.9			1981.874			
I-2124	29	38.9			1995.842			
I-2125	26	41.2			1995.842			
I-2126	68	29.5			2007.879			
I-2127	36	40.8			2031.854			
I-2128	29	27.0			2018.858			
I-2129	105	44.0			2030.895			
I-2130	4924				2012.878	2014.3	2012.3	
I-2131	3219				2012.878	2014.4	2012.5	
I-2132	10000				1929.879	1931.4	1929.3	

I-2133	8745				1929.879	1931.5	1929.6	
I-2134	10000				1977.879	1979.5	1977.6	
I-2135	3409				1977.879	1979.5	1977.7	
I-2136	5820				1977.879	1979.4	1977.3	
I-2137	1900				1977.879	990.4	998.3	
I-2138	1012				1959.869	1961.9	1960	
I-2139	970				1959.869	1961.9	1959.9	
I-2140	233				1910.848	1912.9	1911	
I-2141	310				1910.848	1913	1911.2	
I-2142	271	>>20			1844.827	1846.8	1844.9	
I-2143	217				1844.827	1846.8	1845	
I-2144	2023				1907.863	1909.8	1907.9	
I-2145	2068				1907.863	955.5	1907.9	
I-2146	248				1924.864	1927	1925.2	
I-2147	390				1924.864	1927.1	1925	
I-2148	10000				1888.853	1890.8	1888.9	
I-2149	7184				1888.853	1890.9	1888.9	
I-2150	647				2146.903	2149.2	2147.2	
I-2151	58	14.6			2146.903	2149.1	2147.1	
I-2152	3083				2013.822	2016.7	2014.9	
I-2153	1484				2007.866	2010.9	2008.8	
I-2154	9549				1985.881	1988.7	1986.8	
I-2155	10000				2075.853	2078.7	2077	
I-2156	387	>>20			1859.79	1861.7	1859.6	
I-2157	141				1873.806	1875.9	936.5	
I-2158	213	>>20			1887.821	1889.7	1887.8	
I-2159	116	>>20			1887.821	1889.9	1887.9	
I-2160	1243				1863.821			A
I-2161	855	>>20			1877.837	1879.7	1977.6	A
I-2162	1163	>>20			1891.852	1893.7	1891.8	A
I-2163	3718				2090.07	2007.1	2005	
I-2164	1182				2091.029	2093.3	2091.2	
I-2165	441				2020.053	2022.3	2020	
I-2166	1586				2063.059	2065.5	2063.3	
I-2167	199	>>20			2021.012	2023.2	2021	
I-2168	212	>>20			2064.018	2066.2	2064.1	
I-2169	10000				2064.018	2066.2	2064	
I-2170	10000				1987.987	1990.2	1988.1	
I-2171	10000				2002.002	2004.3	2002.6	
I-2172	10000				2037.007	2039.2	2037	
I-2173	3072				2064.018	2066.3	2064	
I-2174	10000				2064.018	2066.3	2064.1	
I-2175	19				1899.85	1901.8	1899.9	

I-2176	87				1933.811	1936.3	1934.4	
I-2177	253				1932.852	968.3	966.2	
I-2178	42				1917.841	1919.9	1917.9	
I-2179	67				1916.882	1918.9	1917.1	
I-2180	2086				1900.845	1902.9	1900.8	
I-2181	2877				1899.887	1901.9	1900	
I-2182	5	11.1			1928.761	1931.7	1930.2	
I-2183	5	5.0			1927.802	1930.8	1928.6	
I-2184	358				2108.835	1054.6	1052.5	
I-2185	42	6.1			2108.835	1054.7	1052.4	
I-2186	459				2186.952	1095.2	2186.9	
I-2187	28	10.8			2186.952	1095.2	2187	
I-2188	11	7.6			2005.899	2008	2005.9	
I-2189	83	33.4			2004.941	2092.5	2090.4	
I-2190	28	33.4			1978.889	991.1	1979	
I-2191	16	29.5			2033.931	2036.1	2034.1	
I-2192	22	16.1			2047.946	1025.7	2048.3	
I-2193	164	39.9			2032.972	2035.2	2033.2	
I-2194	91	8.8			2004.941	2007.1	2005.1	
I-2195	62	21.0			2006.92	2009.1	2007.1	
I-2196	41	39.3			2061.962	1032.7	2062	
I-2197	2448				1887.832	1889.8	1887.9	
I-2198	1465				1887.832	1889.8	1888.1	
I-2199	927				1915.864	1917.8	1915.8	
I-2200	8401				1844.863	1846.8	1844.9	
I-2201	10000				1859.801	1861.7	1859.8	
I-2202	11	5.0			1968.848	986	1968.9	
I-2203	9	2.9			2037.879	2040.3	2038.4	
I-2204	10	3.3			2037.879	2040.3	2038.4	
I-2205	18	3.2			1996.852	1000.3	1997.4	
I-2206	7	7.1			2009.874	1006.5	2010	
I-2207	16	3.2			1966.869	1968.8	1966.9	
I-2208	27	5.7			2059.871	2061.9	2060	
I-2209	50	18.6			2018.845	1011.1	2018.8	
I-2210	128	12.4			2046.849	1025.2	1023.3	
I-2211	23	12.9			2059.871	1031.6	2060	
I-2212	60	6.6			2016.865	1010	2017	
I-2213	5252				1889.848	1892.8	1890.9	
I-2214	1857				2005.987	2008.1	2006.3	
I-2215	1542				1969.987	1971.9	1970	
I-2216	7	3.4			2003.834	2006.9	2005.2	
I-2217	6	2.1			1989.818	997	995.1	
I-2218	34	5.1			2024.838	1014.5	1012.8	

I-2219	21	2.7			2065.865	1035	2067.1	
I-2220	12	16.3			1969.873	1972.4	1969.8	
I-2221	11	5.0			1955.857	1958.4	1955.8	
I-2222	84	11.7			1990.877	1993.4	1992.3	
I-2223	50	9.0			2031.904	1017.8	1015.7	
I-2224	14	14.2			1969.873	1972.4	1969.7	
I-2225	13	7.8			1955.857	979.8	977.5	
I-2226	97	10.6			1990.877	997.3	995.2	
I-2227	47	6.3			2031.904	1017.8	1015.7	
I-2228	2142				1722.717	1724.9	1722.9	
I-2229	6				2067.922	2070.1	2068.1	
I-2230	8				2067.922	2070.1	2068.3	
I-2231	5187				1850.812	1852.9	1851.2	
I-2232	10000				1850.812	1853.1	1851.3	
I-2233	14	>>20			2057.963	2060.3	2058	
I-2234	22	>>20			2043.947	2046.2	2044	
I-2235	40	>>20			2069.963	2072.4	2070	
I-2236	23	15.3			2130.908	2133.1	2130.9	
I-2237	5	24.3			2049.9	2052.1	2050.1	
I-2238	11				2147.974	2150.3	2148.2	
I-2239	10	31.9			2071.942	2074.2	2071.9	
I-2240	5	>>20			2084.974	2087.3	2085.3	
I-2241	18	17.7			2152.874	2155.2	2153	
I-2242	13	21.4			2138.858	2141	2139.1	
I-2243	15	25.2			2071.979	2074.2	2072	
I-2244	16	27.4			2057.963	2060.2	2058	
I-2245	26	>>20			2083.979	2086.2	2084	
I-2246	27	12.9			2144.924	2147	2145	
I-2247	8	5.9			2063.916	2066	2064.1	
I-2248	8	21.5			2161.989	2164.2	2162.1	
I-2249	14	42.2			2085.958	2088.2	2086.1	
I-2250	12	36.2			2098.99	2101.2	2099.1	
I-2251	15	6.4			2166.889	2168.9	2167.1	
I-2252	31	17.5			2152.874	2154.9	2153	
I-2253	189				1996.828	1000.6	998.3	
I-2254	5792				2011.943	2013.8	2011.9	
I-2255	7647				1984.002	1985.9	1983.9	
I-2256	8412				2073.974	2075.9	2073.9	
I-2257	15	2.9			1934.862			
I-2258	272				1950.857			
I-2259	30	4.3			1968.847			
I-2260	21	3.1			1952.853			
I-2261	34	6.4			1946.896			

I-2262	18	3.7			1952.853			
I-2263	47	4.3			1946.896			
I-2264	45	25.5			2084.888	2087.1	2085	
I-2265	67	>>20			2088.919	2091.2	2089	A
I-2266	266				2048.833	2051.1	2048.9	
I-2267	499				2052.865	2055.1	2052.9	A
I-2268	13	3.1		4.3	2333.054			
I-2269	20	2.3		3.9	2475.128			
I-2270	40				2617.202			
I-2271	13	2.3		9.0	2204.995			
I-2272	43	3.0			2361.085			
I-2273	107	6.2			2517.175			
I-2274	10	2.0		6.2	2090.952			
I-2275	117	3.5			2317.12			
I-2276	157.5	4.0	3.9	>20	2317.12			
I-2277	114	2.3		9.0	2275.073			
I-2278	119.5	2.8		>20	2275.073			
I-2279	7233	>>20			2543.288			
I-2280	10000	>>20	>>20	>20	2543.288			
I-2281	138	4.3			2417.148			
I-2282	155.5	3.7			2417.148			
I-2283	2862	4.5			2601.269			
I-2284	2683	12.9			2601.269			
I-2285	94				2017.738	1011.1	1008.5	
I-2286	88				2040.777	1022.9	2043.1	
I-2287	7	7.1			2031.813	2034.8	2032.5	
I-2288	5	6.7			2017.797	2020.8	2018.8	
I-2289	8	9.0			2052.817	2055.8	2053.8	
I-2290	14	7.9			2093.844	2096.8	2094.9	
I-2291	5	4.9			1963.943	1965.8	1963.9	
I-2292	9	2.7			1949.927	1951.9	1950	
I-2293	15	5.7			1984.947	994	992.1	
I-2294	16	4.6			2025.974	2027.9	2025.9	
I-2295	5	3.3			1975.943	1977.9	1976	
I-2296	6	5.1			1961.927	1963.9	1961.9	
I-2297	68	5.5			1996.947	1998.9	1997	
I-2298	8	4.6			2037.974	2039.9	2038	
I-2299	7	5.2			2166.999	2169.1	2167.2	
I-2300	6	1.2		>20	2166.999	2169.1	2167.3	
I-2301	5	>>20			2076.973	2079.2	2077.3	
I-2302	5	2.5			2005.899	2007.9	2005.8	
I-2303	5	1.2			2005.899	2008	2006	
I-2304	511				2020.909			

I-2305	65	>>20			2020.909			
I-2306	45	>>20			1897.769	1899.3	1897.5	
I-2307	16	8.9			2013.822	2016.8	2015.1	
I-2308	8	6.0			1999.807	1002	1000.2	
I-2309	17	13.7			1985.927	1988	1986.1	
I-2310	18	8.9			1971.912	1973.9	1971.5	
I-2311	5	5.2			1999.943	2001.9	2000.1	
I-2312	5	5.2			1985.927	1987.9	1985.9	
I-2313	22	24.3			1999.943	2001.9	2000.1	
I-2314	48	>>20			1985.927	1988	1986.1	
I-2315	5	1.2	1.5	>20	2123.957	1063.3	1061.3	
I-2316	11	1.6		>20	2204.976	2206.3	2204.4	
I-2317	12	18.8			2205.051	2206.6	2204.6	
I-2318	5	1.8		>20	2136.952	2138.3	2136.4	
I-2319	5	1.0	1.7	>20	2164.983	1083.8	1081.8	
I-2320	29	2.7		>20	2155.962	1079.3	1076.9	
I-2321	5	1.7			2214.966	1108.8	1106.8	
I-2322	7	1.8		>20	2169.998	2171.3	2169.4	
I-2323	6	17.7			2208.062	2209.5	2207.5	
I-2324	83	14.8			1978.862			
I-2325	1353				2046.924			
I-2326	185				2017.838			
I-2327	376				2040.877			
I-2328	170	>>20			2166.929	2169.1	2167.1	A
I-2329	3795				2039.891	2042	2040.1	
I-2330	3856				2025.875	2027.9	2025.8	
I-2331	10000				1915.864	1917.4	1915.3	
I-2332	10000				1915.864	1917.3	1915.3	
I-2333	10000				1900.864	1902.3	1900.3	
I-2334	656				1831.831	917.3	1831.3	
I-2335	7	37.0			1991.859	1993.4	1991.3	
I-2336	19	14.4			1978.863	1980.4	1978.3	
I-2337	311				1897.853	1899.8	1897.7	
I-2338	63	>>20			1915.864	1917.5	1915.5	
I-2339	2816				1915.864	1917.4	1915.5	
I-2340	5	>>20			2110.064	2112	2109.9	
I-2341	42	>>20			2145.062	2146.8	2144.8	
I-2342	2725				2109.08	2110.9	2108.8	
I-2343	10000				2109.08	2110.8	2108.8	
I-2344	586				2020.053	2021.8	2019.6	
I-2345	1267				2020.053	2021.7	2019.7	
I-2346	422				2047.101	2048.9	2046.9	
I-2347	5632				2047.101	1025	2047.4	

I-2348	179				2056.064	2057.7	2055.7	
I-2349	1155				2056.064	2057.6	2055.7	
I-2350	63	>>20			2047.101	2048.8	2046.8	
I-2351	187				2056.064	2057.9	2056	
I-2352	211				1990.043	1991.8	1989.7	
I-2353	2757				2034.069	2035.8	2033.8	
I-2354	100	>>20			1977.97	1979.4	1977.3	
I-2355	417				1977.97	1979.3	1977.3	
I-2356	5274				1943.884	1945.7	1943.8	
I-2357	6989	>>20			1943.884	1945.7	1943.8	
I-2358	463	52.2			1943.884	1945.7	1943.8	
I-2359	424	>>20			1929.868	1931.7	1929.8	
I-2360	2443	>>20			1929.868	1931.7	1929.8	
I-2361	349	36.7			1929.868	1931.7	1929.8	
I-2362	66				1955.822	1957.7	1955.9	
I-2363	44				1997.869	1999.7	1998.6	
I-2364	116				1997.869	1999.7	1998.2	
I-2365	3442				1957.899	980.5	1958.4	
I-2366	1737				1943.884	973.4	1943.7	
I-2367	7	6.2			2072.932	1038	1036	
I-2368	5	5.0			2100.963	2102.8	2100.9	
I-2369	14	9.5			2086.947	1045	1043	
I-2370	12				2031.905	2033.4	2031.5	
I-2371	5	5.0			2031.905	2033.7	2031.7	
I-2372	5	2.6	2.1	7.0	2059.937	2061.6	2059.8	
I-2373	5	4.0			2017.89	2019.6	2017.7	
I-2374	7	3.4	2.6		2045.921	1024.5	1022.5	
I-2375	5	13.5			2009.942	2011.7	2009.6	
I-2376	352				2011.871	2013.4	2011.6	A
I-2377	978				2108.924	2110.5		A
I-2378	31	4.8	1.0		2238.036	1120.4	1118.5	
I-2379	245.5	5.0			2266.067	1134.5	1132.6	
I-2380	329.5	2.7	1.5	>20	2280.083	1141.5	1139.5	
I-2381	1471	2.1	1.1	>20	2314.067	1158.5	1156.5	
I-2382	37	4.0	7.6		2295.057	2296.8	2294.9	
I-2383	77	4.2	0.8		2268.046	1135.4	1133.5	
I-2384	5	4.6	1.1		2254.031	2255.7	2253.9	
I-2385	563.5	4.0	1.8		2280.083	1141.5	1139.4	
I-2386	75.5	2.8	0.7		2252.052	1127.6	1125.6	
I-2387	120	7.1	1.5		2278.067	1140.6	1138.4	
I-2388	133	5.7	1.2		2264.052	1133.5	1131.4	
I-2389	72				2250.036	1126.4	1124.4	
I-2390	22	9.1	1.4		2281.042	2282.8	2280.9	

I-2391	110	8.2	0.7		2280.083	1141.5	1139.5	
I-2392	461.5	8.6			2330.062	2331.9	2330.1	
I-2393	61	>>20	5.6		2323.1	2325.1	2323.1	
I-2394	534.5	2.2	0.7	>20	2353.078	1178.1	1176.1	
I-2395	28	5.5	1.2		2238.036	2239.7	2237.8	
I-2396	187	8.3	1.5		2280.083	1141.5	1139.5	
I-2397	53	7.8			2268.046	1135.5	1133.5	
I-2398	28	3.6	1.3		2295.057	2296.8	2294.9	
I-2399	17	2.8	2.2		2195.989	2197.7	2195.8	
I-2400	142.5	2.5	0.8		2272.02	1137.5	1135.5	
I-2401	37	4.4	0.8		2224.02	1113.5	1111.5	
I-2402	16	>>20			1949.812	1951.4	1949.2	
I-2403	12	>>20			1972.851	987.9	985.8	
I-2404	781				2025.887	2027.6	2025.6	A
I-2405	568				2122.94	2124.8	2123	A
I-2406	242				2180.945	2182.7	2180.8	A
I-2407	138	>>20			1957.922	1959.6	1957.4	
I-2408	10000				1914.905	1916.3	1914.3	
I-2409	397	50.0			1902.868	1904.3	1902.3	
I-2410	304	>>20			1938.88	1940.3	1938.3	
I-2411	140				1858.842	1860.7	1858.9	
I-2412	267				1934.874	1936.7	1934.8	
I-2413	133		>>20		1943.906	1945.6	1943.3	
I-2414	7	>>20			1924.864	1926.8	1924.8	
I-2415	147	>>20			1901.848	1903.3	1901.2	
I-2416	133	>>20	>>20		1888.853	1890.1	1888.2	
I-2417	158	21.6			1927.814	1930	1927.8	
I-2418	10000				1947.996	1949.7	1947.3	
I-2419	203	>>20			1978.006	1979.6	1977.3	
I-2420	2125				1991.002	1992.6	1990.3	
I-2421	145	>>20			2005.017	2006.7	2004.6	
I-2422	3360				1963.991	1965.6	1963.3	
I-2423	10000				1978.006	1979.6	1977.4	
I-2424	10000				1962.011	1963.6	1961.4	
I-2425	10000				2061.043	2062.4	2060.4	
I-2426	46	>>20	>>20		2103.09	2104.7	2102.6	
I-2427	757				2061.08	2062.5	2060.6	
I-2428	401				2103.127	2104.5	2102.5	
I-2429	10	>>20			2048.085	2049.4	2047.5	
I-2430	32	4.5			2095.962	2097.9	2095.9	
I-2431	33	7.0			2095.962	1049.5	1047.2	
I-2432	60				2235.036	2236.4	2234.5	
I-2433	10000				1959.848	981.6.	1960.1	

I-2434	10000				1978.965	990.8.	1978.2	
I-2435	10000				1935.996	1937.1	1935.1	
I-2436	10000				1894.933	948.8.	946.7.	
I-2437	10000				1937.939	1939.2	1937.2	
I-2438	1762				1905.912	1907.3	1905.1	
I-2439	2762				1932.923	1934.4	1932.2	
I-2440	360				1945.919	1947.4	1945.2	
I-2441	10000				1924.955	1926.4	1924.2	
I-2442	282				1930.944	1932.3	1930.2	
I-2443	6674				1908.948	855.8.	853.5.	
I-2444	121				2235.036	1118.8	1116.7	
I-2445	5	17.1	9.5		2022.901	2024.1	2022.2	
I-2446	93	>>20			2053.021	2054.3	2052.4	
I-2447	3249				1950.959	1958.2	1956.3	
I-2448	84	>>20			2020.053	2027.5	2025.4	
I-2449	10000				1950.995	1958.6	1956.3	
I-2450	63	>>20			2020.09	2027.4	2025.4	
I-2451	4861				1987.958	1989.3	1987.4	A
I-2452	7201				2057.052	2058.6	2054.4	A
I-2453	10000				2024.085	2031.6	2029.4	A
I-2454	10000				1955.027	1962.5	1960.2	A
I-2455	10000				2024.121	2031.4	2029.4	A
I-2456	49	8.1			2067.93	2068.9	2067.1	
I-2457	52	20.8			2067.93	2090.8	2067	
I-2458	33	5.9			2067.93	2068.9	2067	
I-2459	56	15.1			2067.93	2090.8	2067.1	
I-2460	82	12.8			2047.958	2048.9	2047	
I-2461	75	25.4			2047.958	2070.8	2047	
I-2462	40	4.7			2061.974	2063.1	2061.2	
I-2463	47	6.5			2061.974	1032.1	2061.1	
I-2464	79	16.5			2061.974	2063.1	2061.2	
I-2465	164	>>20			2061.974	2084.8	2061	
I-2466	15				2152.983	2153.9	2152.1	
I-2467	10	2.5	1.4		2125.95	2127	2125	
I-2468	38	6.2	6.4	>20	2138.968	2140	2138.1	
I-2469	7	2.3	0.6	5.6	2076.937	2078	2076.1	
I-2470	24				2152.983	2153.9	2152	
I-2471	14	2.1			2125.95	2126.9	2125.1	
I-2472	13	1.8			2124.952	2125.8	2123.9	
I-2473	7				2076.937	2077.9	2076	
I-2474	19				2165.982	2167	2165.1	
I-2475	28				2164.983	2187.8	2164	
I-2476	7				2116.968	2118	2116.1	

I-2477	165	>>20			1915.9	1917.3	1915.1	
I-2478	310	>>20			1950.868	976.6.	974.7.	
I-2479	627				1900.889	951.7.	950.18	
I-2480	475				1886.874	944.6.	942.6.	
I-2481	754				1973.884	988.2.	986.19	
I-2482	5				2036.916	2038.1	2036.1	
I-2483	5				2078.963	2080.1	2078.2	
I-2484	6291	>>20			2104.941	2105.9	2104.2	
I-2485	4754	>>20			2104.941	2127.8	2104.1	
I-2486	34	3.7			2087.876	2089.3	2087.6	
I-2487	36	4.2			2087.876	1045.3	1043.4	
I-2488	26	3.6			2071.905	2072.9	2071.2	
I-2489	29	7.4			2071.905	1037.1	1035.1	
I-2490	39	6.4			2087.876	2089.4	2087.5	
I-2491	49	6.1			2087.876	1045.3	1043.4	
I-2492	174	>>20			1913.848	1917.3	1915.1	
I-2493	267	>>20			1941.879	976.6.	974.7.	
I-2494	102	>>20			1929.879	951.7.	950.19	
I-2495	95	>>20			1915.864	944.6.	942.6.	
I-2496	106	>>20			1929.879	988.2.	986.19	
I-2497	105	>>20			1915.864	1916.9	1914.9	
I-2498	449				2033.996	2035.1	2033	
I-2499	10000				2046.032	2047.1	2045.1	
I-2500	10000				2074.064	2075.2	2073.1	
I-2501	154	>>20			2089.038	2090.2	2088.1	
I-2502	214	>>20			2075.023	2076.1	2074	
I-2503	1306				2033.996	2035.1	2033.1	
I-2504	210	>>20			2061.007	2062	2060.1	
I-2505	687				2053.915	2054.8	2052.9	
I-2506	332				2053.915	1028	2052.9	
I-2507	168				2053.915	1028.1	2052.9	
I-2508	152	27.3			2067.93	2068.9	2067	
I-2509	17				2067.93	2069	2067	
I-2510	24	7.8			2067.93	1035.1	2066.9	
I-2511	566				2081.946	2082.9	2081	
I-2512	245				2081.946	2183.1	2181.2	
I-2513	66	>>20			2081.946	2082.9	2081	
I-2514	74				2081.946	2082.8	2080.9	
I-2515	1608	>>20			2081.946	1042.1	2080.9	
I-2516	209				2081.946	1042.1	2081	
I-2517	61	30.0			2081.946	1042.1	2081	
I-2518	212	>>20			2053.915	2054.8	2052.9	
I-2519	94				2067.93	1035.1	2067.2	

I-2520	27	5.9	5.7		2140.994	1071.7	2140.3	
I-2521	38	5.6	3.0		2099.968	1051.2	2100	
I-2522	219	>>20			2103.054	2104.2	2102.1	
I-2523	1732	>>20			2165.07	2166.2	2164.2	
I-2524	609				2139.021	2140.2	2138.1	
I-2525	4287				2157.026	2158	2156.1	
I-2526	224	>>20			2279.159	2280.2	2278.3	
I-2527	263	>>20			2188.107	2189.3	2187.2	
I-2528	610				2160.112	2161.3	2159.2	
I-2529	153	33.2			2055.93			A
I-2530	102				2041.915			A
I-2531	179				2043.93			A
I-2532	14	4.5		>20	2081.946			
I-2533	28	6.2		>20	2081.946	2083.1	2081.2	
I-2534	21	4.4			2115.93	2117.2	2115.3	
I-2535	11	3.7			2124.952			
I-2536	13	4.5			2124.952	2126.1	2124.2	
I-2537	11	2.9			2166.962	2168.2	2166.3	
I-2538	14	3.5			2166.962	2168.1	2166.2	
I-2539	11	3.6			2138.968	2140.2	2138.2	
I-2540	14	3.5			2138.968			
I-2541	21	4.7		>20	2123.957	2125.1	2123.2	
I-2542	23	4.0		>20	2123.957	2125.1	2123.3	
I-2543	37	7.3			2157.941	2159.1	2157.2	
I-2544	11	4.1			2166.962	2168.1	2166.2	
I-2545	16	4.0			2166.962	2168.1	2166.3	
I-2546	13	3.5			2208.973			
I-2547	13	3.5			2208.973	2210.1	2208.3	
I-2548	11	3.6			2180.978	2182.1	2180.2	
I-2549	13	2.5			2180.978	2182.2	2180.3	
I-2550	1721				2035.871	2036.7	2034.8	
I-2551	8	9.8			2033.931	2035.2	2033.3	
I-2552	12	10.4			2033.931	2035.2	2033.4	
I-2553	10	8.2			2075.941	2077.2	2075.4	
I-2554	8	3.3			2121.983	2123.6	2121.7	
I-2555	11	22.1			2157.036	2458.7	2156.5	
I-2556	6	7.0			2116.968	2118.3	2116.5	
I-2557	29	19.6			2141.949	2143.2	2141.4	
I-2558	7	14.7			2047.91	2049.2	2047.3	
I-2559	8	3.8			2093.952	2095.5	2093.6	
I-2560	9	19.3			2129.004	2130.8	2128.6	
I-2561	5	7.2			2088.937	2090.2	2088.5	
I-2562	10000				2120.821	2123.3	2121.6	

I-2563	48	17			2027.899	2029.2	2027.3	
I-2564	259				2055.93	2057.2	2055.2	
I-2565	90	21			2055.93	2057.2	2055.3	
I-2566	181				2124.952	2126.3	2124.4	
I-2567	522				2152.983	2154.3	2152.4	
I-2568	4770				2183.953	2185.2	2183.1	
I-2569	1948				2241.958	1122.3	1120.3	
I-2570	1278				2031.93	2033.2	2031.3	A
I-2571	42	24			2059.962	2061.2	2059.4	A
I-2572	67	>>20			2128.983	2130.3	2128.4	A
I-2573	234				2157.014	1079.8	1077.9	A
I-2574	2960				2130.999	2133.3	2131.2	A
I-2575	8156				2282.026	1133.3	1131.4	
I-2576	6	16.1		>20	2009.858	2011.2	2009.4	
I-2577	7	2.7		9.5	2009.858	2011.4	2009.5	
I-2578	5	5.5	4.1	7.7	2076.937	1639.7	1637.8	
I-2579	41	4.7		15.3	2138.968	1070.7	1068.8	
I-2580	993				2053.915	2055.5	2053.6	
I-2581	205	>>20			2067.93	2069.6	2067.8	
I-2582	263	>>20			2067.93	2069.6	2067.6	
I-2583	224	>>20			2081.946	2083.6	2081.9	
I-2584	1840				2053.915	2055.7	2053.9	
I-2585	452				2067.93	2069.8	2068.1	
I-2586	345				2067.93	2069.8	2068	
I-2587	273				2081.946	2083.7	2081.9	
I-2588	26				2005.899	2007.6	2005.8	
I-2589	25	15.2			2005.899	2007.6	2005.8	
I-2590	25	18.9			2019.915	2021.6	2019.8	
I-2591	602				1991.884	1993.6	1991.8	
I-2592	37	>>20			2005.899	2007.6	2005.5	
I-2593	27	29.4			2005.899	2007.6	2006	
I-2594	470	>>20			2042.877	2044.5	2042.8	B
I-2595	356	>>20			2042.877	2044.5	2042.9	B
I-2596	10000				2069.91	2071.6	2069.9	B
I-2597	726				2069.91	2069.6	2067.7	B
I-2598	1346				1887.821	1889.4	1887.8	
I-2599	234	>>20			1873.806	1875.5	1873.9	
I-2600	923				1891.852	1893.5	1891.6	A
I-2601	592				1877.837	1879.5	1877.7	A
I-2602	8217				1963.852	1965.5	1963.7	
I-2603	767				1949.837	1951.5	1949.9	
I-2604	1119				1967.884	1969.6	1967.8	A
I-2605	608				1953.868	1955.5	1953.8	A

I-2606	734		>>20		1939.852	1941.8	1940.2	A
I-2607	904		>>20		2015.884	2017.9	2016.2	A
I-2608	251				1863.821	1865.9	1864.1	A
I-2609	2651				1905.868	1908	1906.2	A
I-2610	215				2039.899	2042.1	2040.2	
I-2611	188				2053.915	2056.1	2054.2	
I-2612	85				1991.884	1993.8	1991.7	
I-2613	183				2053.915	2056.1	2054.9	
I-2614	97				2053.915	2056.1	2054.3	
I-2615	115				2067.93	2070.1	2068.5	
I-2616	175				2067.93	2070.1	2068.3	
I-2617	130				1991.884	1993.7	1992.4	
I-2618	77				2005.899	2008.1	2006.3	
I-2619	36				2005.899	2008.2	2006.3	

[0782] Table E3. Certain peptides and compositions thereof as examples. Peptides are stapled unless indicated otherwise (among other things, the present disclosure also provides unstapled versions of such peptides, optionally protected with one or more protection group (e.g., protection of N-terminus, C-terminus, side chains, etc.), and intermediates thereof). As appreciated by those skilled in the art, stapling may provide more than one stereoisomers (e.g., *E/Z* of double bonds and/or diastereomers), and a stereoisomer can be *EE*, *EZ*, *ZE*, or *ZZ* for a stapled peptide with two staples each independently comprising a double bond. In some embodiments, isomers (or combinations thereof) are listed separately (typically based on HPLC peaks in the order of elution: an earlier eluted peak is assigned a smaller ID number than each later eluted peaks (if any); for example, isomer composition 2 corresponding to a composition of a later eluting peak than isomer composition 1, isomer composition 3 corresponding to a composition of a later eluting peak than isomer composition 2, etc.; in some cases, a peak may contain more than one isomer; in some cases, isomers are not separated (or a single isomer), e.g., when there is one peak on HPLC (e.g., reverse phase HPLC as described in Examples above)). Compositions utilized in various assays are typically of stapled peptides; the present disclosure also provides peptides prior to stapling and compositions thereof. In some embodiments, a HPLC method is as follows: Xselect CSH C18 column 1.7um 2.1x50mm 130 Å; Column temperature 40 °C; Flow 0.6 mL/min; 0.1% formic acid in both acetonitrile and water, 7.2 min gradient from 5 to 95% acetonitrile. In some embodiments, a different gradient and/or a C8 column may be used.

ID	Description
I-1	Ac-Phe-Asp-Ala-RdN-Asp-Asp-Ala-Ala-Phe-Val-S7-Phe-Trp-Gln-NH2
I-2	Ac-Phe-Asp-Ala-RdN-Asp-Asp-Ala-Ala-Phe-Val-S7-Phe-Trp-Gln-NH2
I-3	Ac-Phe-Asp-Ala-R8-Asp-Glu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2

I-4	Ac-Phe-Asp-Ala-R8-Asp-Glu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-5	Ac-Phe-Asp-Ala-R8-Asp-Aad-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-6	Ac-Phe-Asp-Ala-R8-Asp-Aad-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-7	Ac-Phe-Asp-Ala-R8-Asp-4COOHF-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-8	Ac-Phe-Asp-Ala-R8-Asp-4COOHF-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-9	Ac-Phe-Asp-Ala-R8-Asp-3PyrA-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-10	Ac-Phe-Asp-Ala-R8-Asp-3PyrA-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-11	Ac-Phe-Asp-Ala-R8-Asp-Bip-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-12	Ac-Phe-Asp-Ala-R8-Asp-Bip-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-13	Ac-Phe-Asp-Ala-R8-Asp-nLeu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-14	Ac-Phe-Asp-Ala-R8-Asp-nLeu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-15	Ac-Phe-Asp-Ala-R8-Asp-Cha-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-16	Ac-Phe-Asp-Ala-R8-Asp-Cha-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-17	Ac-Phe-Asp-Ala-R8-Asp-hLeu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-18	Ac-Phe-Asp-Ala-R8-Asp-hLeu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-19	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Asp-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-20	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Asp-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-21	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Glu-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-22	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Glu-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-23	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Aad-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-24	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Aad-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-25	Ac-Phe-Asp-Ala-R5-Asp-Asp-Ala-Ala-Phe-Val-SeN-Phe-Trp-Gln-NH2
I-26	Ac-Phe-Asp-Ala-R6-Asp-Asp-Ala-Ala-Phe-Val-SeN-Phe-Trp-Gln-NH2
I-27	Ac-Phe-Asp-Ala-ReN-Asp-Asp-Ala-Ala-Phe-Val-S5-Phe-Trp-Gln-NH2
I-28	Ac-Phe-Asp-Ala-ReN-Asp-Asp-Ala-Ala-Phe-Val-S6-Phe-Trp-Gln-NH2
I-29	Ac-Phe-Asp-Ala-ReN-Asp-Asp-Ala-Ala-Phe-Val-S6-Phe-Trp-Gln-NH2
I-30	Ac-Phe-Asp-Ala-R7-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-31	Ac-Phe-Asp-Ala-R7-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-32	Ac-Phe-Asp-Ala-Az-Asp-Asp-Ala-Ala-Phe-Val-S7-Phe-Trp-Gln-NH2
I-33	Ac-Phe-Asp-Ala-Az-Asp-Asp-Ala-Ala-Phe-Val-S7-Phe-Trp-Gln-NH2
I-34	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-SgN-Phe-Trp-Gln-NH2
I-35	Ac-Phe-Asp-Ala-Az-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-36	Ac-Phe-Asp-Ala-R4-Asp-Asp-Ala-Ala-Phe-Val-SeN-Phe-Trp-Gln-NH2
I-37	Ac-Phe-Asp-Ala-R5-Asp-Asp-Ala-Ala-Phe-Val-SdN-Phe-Trp-Gln-NH2
I-38	Ac-Phe-Asp-Ala-R7-Asp-Asp-Ala-Ala-Phe-Val-Az-Phe-Trp-Gln-NH2
I-39	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-Az-Phe-Trp-Gln-NH2
I-40	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-Az-Phe-Trp-Gln-NH2
I-41	Ac-Phe-Asp-Ala-RdN-Asp-Asp-Ala-Ala-Phe-Val-S4-Phe-Trp-Gln-NH2
I-42	Ac-Phe-Asp-Ala-RdN-Asp-Asp-Ala-Ala-Phe-Val-S4-Phe-Trp-Gln-NH2
I-43	Ac-Phe-Asp-Ala-RgN-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-44	Ac-Phe-Asp-Ala-RgN-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2

I-45	Ac-Phe-Asp-Ala-RgN-Asp-Asp-Ala-Ala-Phe-Val-S7-Phe-Trp-Gln-NH2
I-46	Ac-Phe-Asp-Ala-RgN-Asp-Asp-Ala-Ala-Phe-Val-S7-Phe-Trp-Gln-NH2
I-47	Ac-Phe-Asp-R8-Ala-Asp-Asp-Ala-Ala-Phe-S5-Ala-Phe-Trp-Gln-NH2
I-48	Ac-Phe-Asp-R8-Ala-Asp-Asp-Ala-Ala-Phe-S5-Ala-Phe-Trp-Gln-NH2
I-49	Ac-Phe-Asp-RdN-Ala-Asp-Asp-Ala-Ala-Phe-S7-Ala-Phe-Trp-Gln-NH2
I-50	Ac-Phe-Asp-RdN-Ala-Asp-Asp-Ala-Ala-Phe-S7-Ala-Phe-Trp-Gln-NH2
I-51	Ac-Phe-Asp-R8-Ala-Asp-Asp-Ala-Ala-Phe-PyrS-Ala-Phe-Trp-Gln-NH2
I-52	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-53	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-SeN-Phe-Trp-Gln-NH2
I-54	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-SeN-Phe-Trp-Gln-NH2
I-55	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-SdN-Phe-Trp-Gln-NH2
I-56	Ac-Phe-Asp-Ala-R8-Asp-aMeDF-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-57	Ac-Phe-Asp-Ala-R8-Asp-aMeDF-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-58	Ac-Phe-Asp-Ala-R8-Asp-Gln-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-59	Ac-Phe-Asp-Ala-R8-Asp-Gln-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-60	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Cha-Trp-Gln-NH2
I-61	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Cha-Trp-Gln-NH2
I-62	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Tyr-Trp-Gln-NH2
I-63	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Tyr-Trp-Gln-NH2
I-64	Ac-Ala-Asp-Ile-RdN-Asp-Asp-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-65	Ac-Ala-Asp-Ile-RdN-Asp-Asp-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-66	Ac-Ala-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-67	Ac-Ala-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-68	Ac-Ala-Asp-Ile-RdN-Asp-nLeu-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-69	Ac-Ala-Asp-Ile-RdN-Asp-nLeu-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-70	Ac-Ala-Asp-Ile-RdN-Asp-hLeu-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-71	Ac-Ala-Asp-Ile-RdN-Asp-hLeu-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-72	Ac-Ala-Asp-Ile-RdN-Asp-Cha-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-73	Ac-Ala-Asp-Ile-RdN-Asp-Cha-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-74	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Cha-Val-PyrS-Phe-Trp-Gln-NH2
I-75	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Cha-Val-PyrS-Phe-Trp-Gln-NH2
I-76	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-nLeu-Val-PyrS-Phe-Trp-Gln-NH2
I-77	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-3FF-Val-PyrS-Phe-Trp-Gln-NH2
I-78	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-4FF-Val-PyrS-Phe-Trp-Gln-NH2
I-79	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-34FF-Val-PyrS-Phe-Trp-Gln-NH2
I-80	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-2PyrA-Trp-Gln-NH2
I-81	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-2PyrA-Trp-Gln-NH2
I-82	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-3PyrA-Trp-Gln-NH2
I-83	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-3PyrA-Trp-Gln-NH2
I-84	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-4PyrA-Trp-Gln-NH2
I-85	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-4PyrA-Trp-Gln-NH2

I-86	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-2PyrA-Val-PyrS-Phe-Trp-Gln-NH2
I-87	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-3PyrA-Val-PyrS-Phe-Trp-Gln-NH2
I-88	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-3PyrA-Val-PyrS-Phe-Trp-Gln-NH2
I-89	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-4CBMF-Trp-Gln-NH2
I-90	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-4CBMF-Trp-Gln-NH2
I-91	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-4CBMF-Val-PyrS-Phe-Trp-Gln-NH2
I-92	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-4CBMF-Val-PyrS-Phe-Trp-Gln-NH2
I-93	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-CypA-Trp-Gln-NH2
I-94	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-CypA-Trp-Gln-NH2
I-95	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-CypA-Val-PyrS-Phe-Trp-Gln-NH2
I-96	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-CypA-Val-PyrS-Phe-Trp-Gln-NH2
I-97	Ac-Phe-Asp-Ala-R8-Asp-hPhe-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-98	Ac-Phe-Asp-Ala-R8-Asp-hPhe-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-99	Ac-Phe-Asp-Ala-R8-Asp-Phe-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-100	Ac-Phe-Asp-Ala-R8-Asp-Phe-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-101	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-3OMeF-Trp-Gln-NH2
I-102	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-3OMeF-Trp-Gln-NH2
I-103	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-3OMeF-Val-PyrS-Phe-Trp-Gln-NH2
I-104	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-3OMeF-Val-PyrS-Phe-Trp-Gln-NH2
I-105	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-2CBMF-Trp-Gln-NH2
I-106	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-2CBMF-Trp-Gln-NH2
I-107	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-3CBMF-Trp-Gln-NH2
I-108	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-3CBMF-Val-PyrS-Phe-Trp-Gln-NH2
I-109	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-3CBMF-Val-PyrS-Phe-Trp-Gln-NH2
I-110	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-4COOHF-Trp-Gln-NH2
I-111	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-4COOHF-Trp-Gln-NH2
I-112	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-2NapA-Val-PyrS-Phe-Trp-Gln-NH2
I-113	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-2NapA-Val-PyrS-Phe-Trp-Gln-NH2
I-114	Ac-Phe-Asp-Ala-R8-Asp-1NapA-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-115	Ac-Phe-Asp-Ala-R8-Asp-2NapA-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-116	Ac-Phe-Asp-Ala-R8-Asp-2NapA-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-117	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-hPhe-Val-PyrS-Phe-Trp-Gln-NH2
I-118	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-hPhe-Val-PyrS-Phe-Trp-Gln-NH2
I-119	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-hTyr-Val-PyrS-Phe-Trp-Gln-NH2
I-120	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-hTyr-Val-PyrS-Phe-Trp-Gln-NH2
I-121	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Asp-Trp-Gln-NH2
I-122	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Asp-Trp-Gln-NH2
I-123	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-124	Ac-PL3-Asp-Ala-B5-Asp-Asn-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-125	Ac-PL3-Asp-Ala-B5-Asp-Asn-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-126	Ac-PL3-Asp-Ala-B5-Asp-Gln-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2

I-127	Ac-PL3-Asp-Ala-B5-Asp-Gln-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-128	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-NH2
I-129	Ac-PL3-Asp-Ala-B5-Asp-Aad-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-130	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-SeN-Phe-Trp-Gln-NH2
I-131	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-SeN-Phe-Trp-Gln-NH2
I-132	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S7-Phe-Trp-Gln-NH2
I-133	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Aib-NH2
I-134	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Aib-NH2
I-135	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Ala-NH2
I-136	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-aMeW-Gln-NH2
I-137	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-aMeW-Gln-NH2
I-138	Ac-PL3-Asp-Ala-B5-Asp-nLeu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-139	Ac-PL3-Asp-Ala-B5-Asp-nLeu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-140	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-2NapA-Gln-NH2
I-141	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-2NapA-NH2
I-142	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-6F1NapA-Gln-NH2
I-143	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Qui-Gln-NH2
I-144	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-145	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Bip-Gln-NH2
I-146	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-5FW-Gln-NH2
I-147	Ac-Aib-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Gln-S7-Phe-Trp-NH2
I-148	Ac-Ala-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Gln-S7-Phe-Trp-NH2
I-149	Ac-Asp-Ile-RdN-Asp-Asp-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-150	Ac-Asp-Ile-RdN-Asp-Asp-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-151	Ac-Asp-Ile-RdN-Asp-Asp-Ala-Ala-Phe-Gln-S7-Phe-Trp-NH2
I-152	Ac-Ala-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Ala-S7-Phe-Trp-His-NH2
I-153	Ac-Ala-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Gln-S7-Phe-Trp-Ala-NH2
I-154	Ac-Ala-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Ala-S7-Phe-Trp-Ala-NH2
I-155	Ac-Ala-Asp-Ile-RdN-Asp-Glu-Ala-Ala-Phe-Ala-S7-Phe-Trp-Ala-NH2
I-156	Ac-Ala-Asp-Ala-RdN-Asp-Glu-Ala-Ala-Phe-Gln-S7-Phe-Trp-His-NH2
I-157	Ac-Aib-Asp-Ala-R8-Asp-Glu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-158	Ac-Aib-Asp-Ala-R8-Asp-Glu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Gln-NH2
I-159	Ac-Aib-Asp-Ala-R8-Asp-Glu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Aib-NH2
I-160	Ac-Aib-Asp-Ala-R8-Asp-Glu-Ala-Ala-Phe-Val-PyrS-Phe-Trp-Aib-NH2
I-161	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Glu-Trp-Gln-NH2
I-162	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Glu-Trp-Gln-NH2
I-163	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Ser-PyrS-Phe-Trp-Gln-NH2
I-164	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Ser-PyrS-Phe-Trp-Gln-NH2
I-165	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-5MeOW-Gln-NH2
I-166	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-7FW-Gln-NH2
I-167	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-H2Trp-Gln-NH2

I-168	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-H2Trp-Gln-NH2
I-169	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-5CF3W-Gln-NH2
I-170	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-5CpW-Gln-NH2
I-171	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-5CpW-Gln-NH2
I-172	Ac-PL3-Asp-Ala-B5-Asp-EtGA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-173	Ac-PL3-Asp-Ala-B5-Asp-EtGA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-174	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-Trp-His-NH2
I-175	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-Trp-His-NH2
I-176	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-His-NH2
I-177	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-His-NH2
I-178	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-His-NH2
I-179	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-His-NH2
I-180	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-Gln-NH2
I-181	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-Gln-NH2
I-182	Ac-PL3-Asp-Ala-B5-Asp-DGlu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-183	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Pff-Trp-Gln-NH2
I-184	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-34FF-Val-S8-Phe-2NapA-Gln-NH2
I-185	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-34FF-Ala-S8-Phe-2NapA-Ala-NH2
I-186	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Ala-S8-Phe-Trp-Ala-NH2
I-187	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Ala-S8-Phe-Trp-Ala-NH2
I-188	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-SeN-Phe-Trp-His-NH2
I-189	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-SeN-Phe-Trp-His-NH2
I-190	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-SeN-Phe-Trp-His-NH2
I-191	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-NH2
I-192	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-NH2
I-193	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-NH2
I-194	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-Trp-Ala-NH2
I-195	Ac-PL3-Asp-Ala-B5-Asp-hPhe-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-196	Ac-PL3-Asp-Ala-B5-hPhe-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-197	Ac-PL3-Asp-Ala-B5-hPhe-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-198	Ac-PL3-Asp-Ala-B5-Asn-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-199	Ac-PL3-Asn-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-200	Ac-PL3-Asn-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-201	Ac-PL3-Phe-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-202	Ac-PL3-Tyr-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-203	Ac-PL3-3MeF-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-204	Ac-PL3-3FF-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-205	Ac-PL3-Asp-Ala-B5-nLeu-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-206	Ac-PL3-Asp-Ala-B5-His-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-207	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3MeF-Val-S8-Phe-Trp-Gln-NH2
I-208	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3MeF-Val-S8-Phe-Trp-Gln-NH2

I-209	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-345FF-Val-S8-Phe-Trp-Gln-NH2
I-210	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-345FF-Val-S8-Phe-Trp-Gln-NH2
I-211	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-345FF-Val-S8-Phe-Trp-Gln-NH2
I-212	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-345FF-Val-S8-Phe-Trp-Gln-NH2
I-213	Ac-PL3-Asp-Ala-B5-3pyrA-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-214	Ac-PL3-Asp-Ala-B5-4pyrA-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-215	Ac-PL3-Asp-Ala-B5-Asp-DaMeL-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-216	Ac-PL3-Asp-Ala-B5-Asp-DaMeL-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-217	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-MeTyr-Val-S8-Phe-Trp-Gln-NH2
I-218	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-MeTyr-Val-S8-Phe-Trp-Gln-NH2
I-219	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-35FF-Val-S8-Phe-Trp-Gln-NH2
I-220	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-35FF-Val-S8-Phe-Trp-Gln-NH2
I-221	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Thr-PyrS-Phe-Trp-Gln-NH2
I-222	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Thr-PyrS-Phe-Trp-Gln-NH2
I-223	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Thr-PyrS-Phe-Trp-Gln-NH2
I-224	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Thr-PyrS-Phe-Trp-Gln-NH2
I-225	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Pff-Trp-Gln-NH2
I-226	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Pff-Trp-Gln-NH2
I-227	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Pff-Trp-Gln-NH2
I-228	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Val-PyrS-Pff-Trp-Gln-NH2
I-229	Ac-PL3-Asp-Ala-B5-2pyrA-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-230	Ac-PL3-Asp-Ala-B5-2pyrA-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-231	Ac-PL3-Asp-Ala-B5-Asp-BztA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-232	Ac-PL3-Asp-Ala-B5-Asp-2NapA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-233	Ac-PL3-Asp-Ala-B5-Asp-Trp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-234	Ac-PL3-Asp-Ala-B5-Asp-1NapA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-235	Ac-PL3-Asp-Ala-B5-Asp-Bip-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-236	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-237	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-238	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-239	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-240	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-241	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-242	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-243	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4F3MeF-Val-S8-Phe-Trp-Gln-NH2
I-244	Ac-PL3-Asp-Ala-B5-Asp-3F3MeF-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-245	Ac-PL3-Asp-Ala-B5-Asp-3F3MeF-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-246	Ac-PL3-Asp-Ala-B5-Asp-4F3MeF-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-247	Ac-PL3-Asp-Ala-B5-Asp-4F3MeF-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-248	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-3F3MeF-Trp-Gln-NH2
I-249	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-3F3MeF-Trp-Gln-NH2

I-250	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-3F3MeF-Trp-Gln-NH2
I-251	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-3F3MeF-Trp-Gln-NH2
I-252	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4F3MeF-Trp-Gln-NH2
I-253	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4F3MeF-Trp-Gln-NH2
I-254	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4F3MeF-Trp-Gln-NH2
I-255	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4F3MeF-Trp-Gln-NH2
I-256	Ac-PL3-Asp-Ala-B5-Asp-6F1NapA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-257	Ac-PL3-Asp-Ala-B5-Asp-3FF-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-258	Ac-PL3-Asp-Ala-B5-Asp-4FF-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-259	Ac-PL3-Asp-Ala-B5-Asp-34FF-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-260	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-3FF-Trp-Gln-NH2
I-261	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4FF-Trp-Gln-NH2
I-262	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-34FF-Trp-Gln-NH2
I-263	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-34FF-Trp-Gln-NH2
I-264	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3FF-Val-S8-Phe-Trp-Gln-NH2
I-265	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3FF-Val-S8-Phe-Trp-Gln-NH2
I-266	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4FF-Val-S8-Phe-Trp-Gln-NH2
I-267	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-34FF-Val-S8-Phe-Trp-Gln-NH2
I-268	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-hPhe-Trp-Gln-NH2
I-269	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-hTyr-Trp-Gln-NH2
I-270	Ac-PL3-Asp-Ala-B5-Asp-2PyrA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-271	Ac-PL3-Asp-Ala-B5-Asp-3PyrA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-272	Ac-PL3-Asp-Ala-B5-Asp-4PyrA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-273	Ac-PL3-Asp-Ala-B5-Asp-hTyr-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-274	Ac-PL3-Asp-Ala-B5-Asp-Tyr-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-275	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-1NapA-Trp-Gln-NH2
I-276	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-1NapA-Trp-Gln-NH2
I-277	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-2NapA-Trp-Gln-NH2
I-278	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-2NapA-Trp-Gln-NH2
I-279	Ac-PL3-Glu-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-280	Ac-PL3-Glu-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-281	Ac-PL3-Asp-Ala-B5-Glu-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-282	Ac-PL3-Asp-Ala-B5-Glu-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-283	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Asp-Trp-Gln-NH2
I-284	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Asn-Trp-Gln-NH2
I-285	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-His-Trp-Gln-NH2
I-286	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ala-S8-Phe-Trp-Ala-NH2
I-287	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ala-S8-Phe-Trp-Gln-NH2
I-288	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ala-S8-Phe-Trp-Gln-NH2
I-289	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-NH2
I-290	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-NH2

I-291	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Ala-NH2
I-292	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Ala-NH2
I-293	Ac-PL3-Asp-Ala-B5-Asp-TfeGA-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-294	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-295	Ac-PL3-Asp-Ala-B5-Asp-2NapA-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-296	Ac-PL3-Asp-Ala-B5-Asp-2NapA-Ala-Ala-Phe-Gln-S8-Phe-BztA-Ala-NH2
I-297	Ac-PL3-Asp-Ala-B5-Asp-2NapA-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-298	Ac-PL3-Asp-Ala-B5-Asp-2NapA-Ala-Ala-Phe-Ser-S8-Phe-BztA-Gln-NH2
I-299	Ac-PL3-Asp-Hse-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-Ala-NH2
I-300	Ac-PL3-Asp-Ala-B5-Asp-Qui-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-301	Ac-PL3-Asp-Ala-B5-Asp-hPhe-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-302	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-pff-BztA-Gln-NH2
I-303	Ac-PL3-Asp-Ala-B5-Asp-DipA-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-304	Ac-PL3-Asp-Ala-B5-Asp-His-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-305	Ac-PL3-Asp-Ala-B5-Asp-His-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-306	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3ClF-Val-S8-Phe-Trp-Gln-NH2
I-307	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3ClF-Val-S8-Phe-Trp-Gln-NH2
I-308	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4ClF-Val-S8-Phe-Trp-Gln-NH2
I-309	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4ClF-Val-S8-Phe-Trp-Gln-NH2
I-310	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-3ClF-Trp-Gln-NH2
I-311	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-3ClF-Trp-Gln-NH2
I-312	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4ClF-Trp-Gln-NH2
I-313	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4ClF-Trp-Gln-NH2
I-314	Ac-PL3-His-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-315	Ac-PL3-His-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-316	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-Trp-Ala-NH2
I-317	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-2FF-Val-S8-Phe-Trp-Gln-NH2
I-318	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-2FF-Trp-Gln-NH2
I-319	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-2FF-Trp-Gln-NH2
I-320	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-His-Val-S8-Phe-Trp-Gln-NH2
I-321	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-His-Val-S8-Phe-Trp-Gln-NH2
I-322	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4AmPhe-Val-S8-Phe-Trp-Gln-NH2
I-323	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-4AmPhe-Val-S8-Phe-Trp-Gln-NH2
I-324	Ac-PL3-Asp-Ala-B5-Asp-4AmPhe-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-325	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-2Thi-Val-S8-Phe-Trp-Gln-NH2
I-326	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3Thi-Val-S8-Phe-Trp-Gln-NH2
I-327	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-2FurA-Val-S8-Phe-Trp-Gln-NH2
I-328	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-2FurA-Val-S8-Phe-Trp-Gln-NH2
I-329	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-1meH-Val-S8-Phe-Trp-Gln-NH2
I-330	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-1meH-Val-S8-Phe-Trp-Gln-NH2
I-331	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3meH-Val-S8-Phe-Trp-Gln-NH2

I-332	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3meH-Val-S8-Phe-Trp-Gln-NH2
I-333	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ser-S8-Phe-WCHO-Ser-NH2
I-334	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-WCHO-Ser-NH2
I-335	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-WCHO-Ser-NH2
I-336	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-2CBMF-BztA-Gln-NH2
I-337	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4CBMF-BztA-Gln-NH2
I-338	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4CBMF-BztA-Gln-NH2
I-339	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4COOHF-BztA-Gln-NH2
I-340	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4COOHF-BztA-Gln-NH2
I-341	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Tyr-BztA-Gln-NH2
I-342	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-Phe-BztA-Gln-NH2
I-343	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-344	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-345	Ac-PL3-Asp-S(OMe)-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-346	Ac-PL3-Asp-Gln-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-347	Ac-PL3-Asp-Gln-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-348	Ac-PL3-Ala-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-349	Ac-PL3-Ala-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-350	Ac-PL3-Asp-Ala-B5-Ala-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-351	Ac-PL3-Asp-Ala-B5-Ala-Asp-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-352	Ac-PL3-Asp-Ala-B5-Asp-Ala-Ala-Ala-Phe-Val-S8-Phe-Trp-Gln-NH2
I-353	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Ala-Val-S8-Phe-Trp-Gln-NH2
I-354	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Ala-Val-S8-Phe-Trp-Gln-NH2
I-355	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Ala-Trp-Gln-NH2
I-356	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Ala-Trp-Gln-NH2
I-357	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Ala-Gln-NH2
I-358	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-Ala-Gln-NH2
I-359	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-4CNF-BztA-Gln-NH2
I-360	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-361	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-362	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ala-S8-His-BztA-Gln-NH2
I-363	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-His-Ala-S8-Phe-BztA-Gln-NH2
I-364	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-His-Ala-S8-Phe-BztA-Gln-NH2
I-365	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-2MeF-Ala-S8-Phe-BztA-Gln-NH2
I-366	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-2MeF-Ala-S8-Phe-BztA-Gln-NH2
I-367	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ala-S8-2MeF-BztA-Gln-NH2
I-368	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Val-S8-Phe-7F1NapA-Gln-NH2
I-369	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ala-S8-4MeF-BztA-Gln-NH2
I-370	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-2NapA-Ala-S8-Phe-BztA-Gln-NH2
I-371	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Ala-S8-3FF-BztA-Gln-NH2
I-372	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Ala-S8-3FF-BztA-Gln-NH2

I-373	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Val-S8-Phe-BztA-Gln-NH2
I-374	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Ala-S8-Phe-BztA-Gln-NH2
I-375	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Ala-S8-Phe-BztA-Gln-NH2
I-376	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Ala-S8-Phe-BztA-Gln-NH2
I-377	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Ala-S8-Phe-BztA-Gln-NH2
I-378	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Gln-S8-Phe-BztA-Gln-NH2
I-379	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Gln-S8-Phe-BztA-Gln-NH2
I-380	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-3F3MeF-Gln-S8-Phe-BztA-Gln-NH2
I-381	Ac-PL3-Asp-Ala-B5-Asp-Asn-Ala-Ala-Phe-Val-S8-3FF-BztA-Gln-NH2
I-382	Ac-PL3-Asp-Ala-B5-Asp-Asn-Ala-Ala-Phe-Val-S8-3FF-BztA-Gln-NH2
I-383	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-2pyrA-BztA-Gln-NH2
I-384	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-2pyrA-BztA-Gln-NH2
I-385	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-4pyrA-BztA-Gln-NH2
I-386	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2pyrA-Val-S8-Phe-BztA-Gln-NH2
I-387	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2pyrA-Val-S8-Phe-BztA-Gln-NH2
I-388	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-23FF-BztA-Gln-NH2
I-389	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-23FF-BztA-Gln-NH2
I-390	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-23FF-Val-S8-Phe-BztA-Gln-NH2
I-391	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-23FF-Val-S8-Phe-BztA-Gln-NH2
I-392	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-CypA-Val-S8-Phe-BztA-Gln-NH2
I-393	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-CypA-BztA-Gln-NH2
I-394	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-35FF-BztA-Gln-NH2
I-395	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Val-S8-3MeF-BztA-Gln-NH2
I-396	Ac-PL3-Asp-Ala-B5-Asp-His-Ala-Ala-Phe-Val-S8-3FF-BztA-Gln-NH2
I-397	Ac-PL3-Asp-Ala-B5-Asp-His-Ala-Ala-Phe-Val-S8-3FF-BztA-Gln-NH2
I-398	Ac-PL3-Asp-Ala-B5-Asp-His-Ala-Ala-Phe-Val-SeN-3FF-BztA-Gln-NH2
I-399	Ac-PL3-Asp-Ala-B5-Asp-His-Ala-Ala-Phe-Gln-S8-3FF-BztA-Gln-NH2
I-400	Ac-PL3-Asp-Ala-B5-Asp-His-Ala-Ala-Phe-Gln-SeN-3FF-BztA-Gln-NH2
I-401	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2Thi-Gln-S8-3FF-BztA-Gln-NH2
I-402	Ac-PL3-Asp-Ala-B5-Asp-2Thi-Ala-Ala-Phe-Val-S8-3FF-BztA-Gln-NH2
I-403	Ac-PL3-Asp-Ala-B5-Asp-1meH-Ala-Ala-Phe-Val-S8-3FF-BztA-Gln-NH2
I-404	Ac-PL3-Asp-Ala-B5-Asp-TfeGA-Ala-Ala-3MeF-Gln-S8-3FF-BztA-Gln-NH2
I-405	Ac-PL3-Asp-Ala-B5-Asp-TfeGA-Ala-Ala-3MeF-Gln-SeN-3FF-BztA-Gln-NH2
I-406	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-407	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-408	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-NH2
I-409	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-NH2
I-410	Ac-PL3-Asp-Val-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-411	Ac-PL3-Asp-nLeu-B5-Asp-Glu-Ala-Ala-Phe-Ala-S8-Phe-BztA-Gln-NH2
I-412	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-2Thi-Gln-S8-3FF-BztA-Gln-NH2
I-413	Ac-PL3-Asp-Ala-B5-Asp-tetz-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2

I-414	Ac-PL3-Asp-Ala-B5-tetz-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-415	Ac-PL3-Asp-Ala-B5-tetz-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-416	Ac-PL3-tetz-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-417	Ac-PL3-tetz-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-418	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-419	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-420	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-Phe-BztA-His-NH2
I-421	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-422	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-423	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-Phe-BztA-Gln-NH2
I-424	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-425	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-426	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-3Thi-BztA-Gln-NH2
I-427	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-3Thi-BztA-Gln-NH2
I-428	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-2Thi-BztA-Gln-NH2
I-429	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3Thi-Gln-S8-3FF-BztA-Gln-NH2
I-430	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3Thi-Gln-S8-3FF-BztA-His-NH2
I-431	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3Thi-Gln-S8-3FF-BztA-NH2
I-432	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-433	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-S(OMe)-S8-Phe-BztA-Gln-NH2
I-434	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2FF-BztA-Gln-NH2
I-435	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2ClF-BztA-Gln-NH2
I-436	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2BrF-BztA-Gln-NH2
I-437	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-Gln-NH2
I-438	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3meH-BztA-Gln-NH2
I-439	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-1meH-BztA-Gln-NH2
I-440	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-1meH-BztA-Gln-NH2
I-441	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2NO2F-BztA-Gln-NH2
I-442	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-hPhe-BztA-Gln-NH2
I-443	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-hPhe-BztA-Gln-NH2
I-444	Ac-PL3-Asp-Ala-B5-Asp-Tetz-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-445	Ac-PL3-Asp-Ala-B5-Tetz-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-446	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2Thi-Asn-S8-Phe-BztA-Gln-NH2
I-447	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2Thi-Asn-S8-Phe-BztA-Gln-NH2
I-448	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3Thi-Asn-S8-Phe-BztA-Gln-NH2
I-449	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3Thi-Asn-S8-Phe-BztA-Gln-NH2
I-450	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2Thi-Gln-S8-3FF-Trp-Gln-NH2
I-451	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3Thi-Gln-S8-3FF-Trp-Gln-NH2
I-452	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3Thi-Gln-S8-3FF-Trp-Gln-NH2
I-453	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2FF-Asn-S8-Phe-BztA-Gln-NH2
I-454	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3FF-Asn-S8-Phe-BztA-Gln-NH2

I-455	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-4FF-Asn-S8-Phe-BztA-Gln-NH2
I-456	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2MeF-Asn-S8-Phe-BztA-Gln-NH2
I-457	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2MeF-Asn-S8-Phe-BztA-Gln-NH2
I-458	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-3MeF-Asn-S8-Phe-BztA-Gln-NH2
I-459	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-4MeF-Asn-S8-Phe-BztA-Gln-NH2
I-460	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2FurA-Asn-S8-Phe-BztA-Gln-NH2
I-461	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-4AmPhe-Asn-S8-Phe-BztA-Gln-NH2
I-462	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-Gln-NH2
I-463	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS3-Phe-BztA-Gln-NH2
I-464	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS3-Phe-BztA-Gln-NH2
I-465	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-466	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-467	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-468	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-469	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-470	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-471	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-472	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-473	Ac-PL3-Asp-Abu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-474	Ac-PL3-Asp-Abu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-475	Ac-PL3-Asp-aIle-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-476	Ac-PL3-Asp-aIle-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-477	Ac-PL3-Asp-Thr-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-478	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-1MeH-NH2
I-479	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-1MeH-NH2
I-480	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-3MeH-NH2
I-481	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-3MeH-NH2
I-482	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-Dab-NH2
I-483	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-[Acryl]Dap-BztA-Gln-NH2
I-484	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-[Acryl]Dap-BztA-Gln-NH2
I-485	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-2Thi-Gln-S8-Phe-BztA-Gln-NH2
I-486	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2Thi-Gln-S8-Phe-BztA-Gln-NH2
I-487	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-2Thi-Gln-S8-Phe-BztA-Gln-NH2
I-488	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-2Thi-Gln-S8-Phe-BztA-His-NH2
I-489	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-2Thi-Gln-S8-Phe-BztA-His-NH2
I-490	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-2FurA-NH2
I-491	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Hse-NH2
I-492	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Hse-NH2
I-493	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-DSer-NH2
I-494	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-DGln-NH2
I-495	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Asn-NH2

I-496	Ac-PL3-Asp-Ala-B5-Hse-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-497	Ac-PL3-Asp-Ala-B5-Hse-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-498	Ac-PL3-Asp-Ala-B5-Hse-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-499	Ac-PL3-Asp-Ala-B5-Asp-TfeGA-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-500	Ac-PL3-Asp-Ile-B5-Asp-TfeGA-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-501	Ac-PL3-Asp-F3CA-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-502	Ac-PL3-Asp-F3CA-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-503	Ac-PL3-Asp-HF2CA-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-504	Ac-PL3-Asp-F3CA-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-505	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-506	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-507	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Thr-NH2
I-508	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Thr-NH2
I-509	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Abu-NH2
I-510	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-His-NH2
I-511	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-His-NH2
I-512	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-His-NH2
I-513	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2CBMF-BztA-His-NH2
I-514	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-2CBMF-BztA-His-NH2
I-515	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-516	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-517	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-518	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-519	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-520	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-521	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-522	Ac-PL3-Asp-Nva-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-523	Ac-PL3-Asp-Nva-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-524	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-4Thz-Asn-S8-Phe-BztA-Gln-NH2
I-525	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-2OMeF-BztA-Gln-NH2
I-526	Ac-PL3-Asp-Ala-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-2OMeF-BztA-Gln-NH2
I-527	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-2OMeF-BztA-Gln-NH2
I-528	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-2OMeF-BztA-Gln-NH2
I-529	Ac-PL3-Asp-Ala-B5-[MeSO2]Dap-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-530	Ac-PL3-Asp-Ala-B5-[MeSO2]Dap-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-531	Ac-PL3-Asp-Ala-B5-[MeSO2]Dab-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-532	Ac-PL3-Asp-Ala-B5-[MeSO2]Dab-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-533	Ac-PL3-Asp-Ala-B5-Asp-[MeSO2]Dap-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-534	Ac-PL3-[MeSO2]Dap-Ala-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-535	Ac-PL3-Asp-Ala-B5-[NHiPr]AsnR-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-536	Ac-PL3-Asp-Ala-B5-[NHEt]AsnR-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2

I-537	Ac-PL3-Asp-Ala-B5-[NHnPr]AsnR-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-538	Ac-PL3-Asp-Ala-B5-[NHCyPr]AsnR-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-539	Ac-PL3-Asp-Ala-B5-[NHCyBu]AsnR-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-540	Ac-PL3-Asp-Ala-B5-[NHMe]AsnR-Asp-Ala-Ala-Phe-Val-S8-Phe-BztA-Gln-NH2
I-541	Ac-PL3-Asp-TOMe-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-542	Ac-PL3-Asp-TOMe-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-543	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-544	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-545	Ac-PL3-Asp-hLeu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-546	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-547	Ac-PL3-Asp-hLeu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-548	Ac-PL3-Asp-hLeu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-549	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-Gln-NH2
I-550	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-Gln-NH2
I-551	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-552	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-553	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-His-NH2
I-554	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-2OMeF-BztA-His-NH2
I-555	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-556	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-557	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-558	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-559	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-560	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-561	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-562	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-563	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-564	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-565	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-566	Ac-PL3-Asp-Val-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-567	Ac-PL3-Asp-Val-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-568	Ac-PL3-Asp-Abu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-569	Ac-PL3-Asp-Abu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-570	Ac-PL3-Asp-Abu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-571	Ac-PL3-Asp-Abu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-572	Ac-PL3-Asp-Abu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-573	Ac-PL3-Asp-Abu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-574	Ac-PL3-Asp-Abu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-575	Ac-PL3-Asp-Abu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-576	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-577	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2

I-578	Ac-PL3-Asp-Ala-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-579	Ac-Phe-Asp-Ala-R8-Asp-Asp-Ala-Ala-Phe-Gln-PyrS-Phe-Trp-Gln-NH2
I-580	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-581	Ac-PL3-Asp-Ile-B5-Asp-Asp-Ala-Ala-Phe-Gln-S8-Phe-BztA-His-NH2
I-582	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-583	Ac-PL3-Asp-hLeu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-584	Ac-PL3-Asp-hLeu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-585	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-BztA-Gln-S8-Phe-Phe-Gln-NH2
I-586	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-BztA-Gln-S8-Phe-Phe-Gln-NH2
I-587	Ac-PL3-Asp-Ile-B5-Phe-Glu-Ala-Ala-Phe-Gln-S8-Asp-BztA-Gln-NH2
I-588	Ac-PL3-Phe-Ile-B5-Asp-Glu-Ala-Ala-Asp-Gln-S8-Phe-BztA-Gln-NH2
I-589	Ac-PL3-Asp-[AzAc]Lys-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-590	Ac-PL3-Asp-[AzAc]Lys-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-591	Ac-PL3-Asp-Ile-B5-Asp-Glu-[AzAc]Lys-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-592	Ac-PL3-Asp-Ile-B5-Asp-Glu-[AzAc]Lys-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-593	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-[AzAc]Lys-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-594	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-[AzAc]Lys-S8-Phe-BztA-Gln-NH2
I-595	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-[AzAc]Lys-NH2
I-596	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-[AzAc]Lys-NH2
I-597	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-[AzAc]Lys-NH2
I-598	Nic-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-599	Pic-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-600	Bnc-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-601	Bnc-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-602	2PyPrpc-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-603	Ac-PL3-Asp-Ile-B5-Asp-Gln-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-604	Ac-PL3-Asp-Ile-B5-Asp-Cit-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-605	Ac-PL3-Asp-Ile-B5-Asp-Cit-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-606	Ac-PL3-Asp-Ile-B5-Asp-4COOHF-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-607	Ac-PL3-Asp-Ile-B5-Asp-4COOHF-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-608	Ac-PL3-Asp-Ile-B5-Asp-EtGa-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-609	Ac-PL3-Asp-Ile-B5-Asp-EtGa-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-610	Ac-PL3-Asp-Ile-B5-Asp-TfeGA-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-611	Ac-PL3-Asp-Ile-B5-Asp-TfeGA-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-612	Ac-PL3-Asp-Ile-B5-Asp-Aad-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-613	Ac-PL3-Asp-Ile-B5-Asp-Arg-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-614	Ac-PL3-Asp-Ile-B5-Asp-Arg-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-615	Ac-PL3-Asp-Cha-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-NH2
I-616	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Cit-S8-Phe-BztA-His-NH2
I-617	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-Phe-BztA-His-NH2
I-618	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-Phe-BztA-His-NH2

I-619	Ac-PL3-Asp-Cha-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-620	Ac-PL3-Asp-Cha-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-621	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Cit-S8-Phe-BztA-Gln-NH2
I-622	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-Phe-BztA-Gln-NH2
I-623	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-Phe-BztA-Gln-NH2
I-624	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-625	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-626	Ac-PL3-Asp-Cha-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-627	Ac-PL3-Asp-Cha-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-628	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Cit-S8-Phe-BztA-NH2
I-629	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Cit-S8-Phe-BztA-NH2
I-630	Ac-PL3-Asp-Ile-B5-[Tf]Dap-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-631	Ac-PL3-Asp-Ile-B5-[Tf]Dap-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-632	Ac-PL3-[Tf]Dap-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-633	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Arg-NH2
I-634	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Leu-NH2
I-635	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Phe-NH2
I-636	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Tyr-NH2
I-637	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Pro-NH2
I-638	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Pro-NH2
I-639	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Ser-NH2
I-640	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Ser-NH2
I-641	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Thr-NH2
I-642	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Thr-NH2
I-643	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Trp-NH2
I-644	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Trp-NH2
I-645	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Val-NH2
I-646	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Val-NH2
I-647	Ac-PL3-Asp-Ile-B5-Asp-Glu-Leu-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-648	Ac-PL3-Asp-Ile-B5-Asp-Glu-Leu-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-649	Ac-PL3-Asp-Ile-B5-Asp-Glu-Phe-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-650	Ac-PL3-Asp-Ile-B5-Asp-Glu-Phe-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-651	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ser-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-652	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ser-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-653	Ac-PL3-Asp-Ile-B5-Asp-Glu-Gln-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-654	Ac-PL3-Asp-Ile-B5-Asp-Glu-Gln-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-655	Ac-PL3-Asp-Ile-B5-Asp-Glu-Trp-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-656	Ac-PL3-Asp-Ile-B5-Asp-Glu-nLeu-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-657	Ac-PL3-Asp-Ile-B5-Asp-Glu-nLeu-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-658	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Leu-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-659	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Leu-Phe-Gln-S8-Phe-BztA-Gln-NH2

I-660	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Phe-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-661	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ser-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-662	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ser-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-663	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Gln-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-664	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Trp-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-665	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Trp-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-666	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-nLeu-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-667	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-nLeu-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-668	Ac-PL3-isoDAsp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-669	Ac-PL3-isoDAsp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-670	Ac-PL3-RbGlu-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-671	Ac-PL3-RbGlu-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-672	Ac-PL3-SbGlu-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-673	Ac-PL3-Asp-Ile-B5-isoAsp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-674	Ac-PL3-Asp-Ile-B5-isoDAsp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-675	Ac-PL3-Asp-Ile-B5-RbGlu-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-676	Ac-PL3-Asp-Ile-B5-SbGlu-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-677	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-678	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-679	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-680	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-681	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-682	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-683	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-684	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-Gln-NH2
I-685	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-Gln-NH2
I-686	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-687	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-688	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-689	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-690	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-691	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-692	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-His-NH2
I-693	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-His-NH2
I-694	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-695	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-696	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-697	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-698	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-699	Ac-PL3-Asp-Ile-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-700	Ac-PL3-Asp-Ile-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2

I-701	Ac-PL3-Asp-Ile-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-702	Ac-PL3-Asp-Ile-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-703	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-704	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-705	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-706	Ac-PL3-Asp-Cha-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-NH2
I-707	Ac-PL3-Asp-Cha-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-708	Ac-PL3-Asp-Cha-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-709	Ac-PL3-Asp-Cha-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-His-NH2
I-710	MeSO2-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-711	MeSO2-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-712	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-713	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-714	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-715	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NH2
I-716	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-NH2
I-717	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-NH2
I-718	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-NH2
I-719	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-NH2
I-720	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-NH2
I-721	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-3Thi-BztA-NH2
I-722	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Cha-Gln-S8-Phe-BztA-Gln-NH2
I-723	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Bip-Gln-S8-Phe-BztA-Gln-NH2
I-724	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-3OMeF-Gln-S8-Phe-BztA-Gln-NH2
I-725	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-DipA-Gln-S8-Phe-BztA-Gln-NH2
I-726	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Phg-Gln-S8-Phe-BztA-Gln-NH2
I-727	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-Npg-Gln-S8-Phe-BztA-Gln-NH2
I-728	Ac-PL3-Asp-Ile-B5-Asp-Glu-Ala-Ala-nLeu-Gln-S8-Phe-BztA-Gln-NH2
I-729	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-Ala-NH2
I-730	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-Ala-NH2
I-731	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-dAla-NH2
I-732	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-Ile-NH2
I-733	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-Ile-NH2
I-734	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-dIle-NH2
I-735	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-dIle-NH2
I-736	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-Aib-NH2
I-737	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Gln-Aib-NH2
I-738	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-Ala-NH2
I-739	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-dAla-NH2
I-740	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-Ile-NH2
I-741	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-Ile-NH2

I-742	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-dIle-NH2
I-743	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-His-Aib-NH2
I-744	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-dHis-NH2
I-745	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-dHis-NH2
I-746	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NMeHis-NH2
I-747	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NMeHis-NH2
I-748	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Thr-NH2
I-749	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Thr-NH2
I-750	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Ser-NH2
I-751	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Ser-NH2
I-752	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Asn-NH2
I-753	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-Asn-NH2
I-754	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-dThr-NH2
I-755	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-dThr-NH2
I-756	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-dSer-NH2
I-757	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-dAsn-NH2
I-758	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-dAsn-NH2
I-759	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NMeS-NH2
I-760	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Asn-S8-Phe-BztA-NMeS-NH2
I-761	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-762	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-763	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-Gln-NH2
I-764	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-Gln-NH2
I-765	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-SeN-3Thi-BztA-Gln-NH2
I-766	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-SeN-3Thi-BztA-Gln-NH2
I-767	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Gln-NH2
I-768	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Gln-NH2
I-769	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-770	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-771	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-772	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-773	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-SeN-3Thi-BztA-His-NH2
I-774	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-SeN-3Thi-BztA-His-NH2
I-775	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-His-NH2
I-776	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-His-NH2
I-777	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-His-NH2
I-778	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2Thi-BztA-Gln-NH2
I-779	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2Thi-BztA-His-NH2
I-780	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2OMeF-BztA-Gln-NH2
I-781	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2OMeF-BztA-His-NH2
I-782	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2MeF-BztA-His-NH2

I-783	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-784	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-His-NH2
I-785	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-786	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-787	Ac-PL3-Asp-hLeu-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-788	Ac-PL3-Asp-hLeu-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-789	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-1NapA-His-NH2
I-790	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-2NapA-His-NH2
I-791	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-5ClW-His-NH2
I-792	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-Trp-His-NH2
I-793	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-BztA-BztA-His-NH2
I-794	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-1NapA-BztA-His-NH2
I-795	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2NapA-BztA-His-NH2
I-796	Ac-PL3-Phe-Npg-B5-Asp-Asp-Ala-Ala-Asp-Asn-PyrS2-3Thi-BztA-His-NH2
I-797	Ac-PL3-Phe-Npg-B5-Asp-Asp-Ala-Ala-Asp-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-798	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-6ClW-His-NH2
I-799	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-1MeW-His-NH2
I-800	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-5FW-His-NH2
I-801	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-802	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-His-NH2
I-803	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-804	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-His-NH2
I-805	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Cit-PyrS2-3Thi-BztA-Gln-NH2
I-806	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Cit-PyrS2-3Thi-BztA-His-NH2
I-807	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-808	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-His-NH2
I-809	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-810	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-His-NH2
I-811	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-4Thz-BztA-Gln-NH2
I-812	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-4Thz-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-813	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-dHis-NH2
I-814	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Thr-NH2
I-815	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ser-NH2
I-816	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Asn-NH2
I-817	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-dThr-NH2
I-818	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-dAsn-NH2
I-819	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-Ala-NH2
I-820	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-Ala-NH2
I-821	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Asn-Ala-NH2
I-822	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-dAla-NH2
I-823	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-dAla-NH2

I-824	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Asn-dAla-NH2
I-825	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Gln-Ala-NH2
I-826	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Gln-Ala-NH2
I-827	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-His-Ala-NH2
I-828	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-His-Ala-NH2
I-829	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Asn-Ala-NH2
I-830	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Gln-dAla-NH2
I-831	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Gln-dAla-NH2
I-832	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-His-dAla-NH2
I-833	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-His-dAla-NH2
I-834	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Asn-dAla-NH2
I-835	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Asn-dAla-NH2
I-836	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-837	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-838	Ac-PL3-Asp-Npg-B5-Asp-Gln-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-839	Ac-PL3-Asp-Npg-B5-Asp-Gln-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-840	Ac-PL3-Asp-Npg-B5-Asp-Cit-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-841	Ac-PL3-Asp-Npg-B5-Asp-Cit-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-842	Ac-PL3-Asp-Npg-B5-Asp-Tyr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-843	Ac-PL3-Asp-Npg-B5-Asp-Tyr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-844	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-845	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-846	Ac-PL3-Asp-Npg-B5-Asp-Leu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-847	Ac-PL3-Asp-Npg-B5-Asp-Leu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-848	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-849	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-850	Ac-PL3-Asp-Npg-B5-Asp-4COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-851	Ac-PL3-Asp-Npg-B5-Asp-4COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-852	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-853	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-854	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-855	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-856	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-857	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-858	Ac-PL3-Asp-Npg-B5-Asp-Gln-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-859	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-860	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-861	Ac-PL3-Asp-Npg-B5-Asp-Cit-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-862	Ac-PL3-Asp-Npg-B5-Asp-Leu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-863	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-864	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2

I-865	Ac-PL3-Asp-Npg-B5-Asp-Asp-[FAM6Ppg][1TriAc]Lys-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-866	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[FAM6Ppg][1TriAc]Lys-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-867	Ac-PL3-Asp-Npg-B5-Asp-Leu-[FAM6Ppg][p1TB]Lys-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-868	Ac-PL3-Asp-Npg-B5-Asp-Leu-[FAM6Ppg][p1TB]Lys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-869	Ac-PL3-Asp-Npg-B5-Asp-Leu-[FAM6Ppg][p1TB]Lys-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-870	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-Ala-Ala
I-871	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-dAla-Ala
I-872	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-dAla-dAla
I-873	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-Ala-Ala
I-874	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-Ala-Ala
I-875	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-dAla-Ala
I-876	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-dAla-dAla
I-877	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-Ala-Ala
I-878	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-[AzAc]Lys-NH2
I-879	Ac-PL3-Asp-Npg-B5-Asp-Asp-[AzAc]Lys-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-880	Ac-PL3-Asp-[AzAc]Lys-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-881	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-6AmHex
I-882	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-6AmHex
I-883	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[35CF3PhPr]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-884	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[1NapPr]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-885	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[22PhPr]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-886	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[MorphAc]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-887	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[MePipAc]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-888	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[MeBipipAc]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-889	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[4MePipBz]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-890	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[MeMorphBz]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-891	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[Me2NCBz]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-892	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[mPEG2]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-893	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[mPEG2]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-894	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[mPEG4]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-895	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[mPEG6]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-896	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[mPEG8]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-897	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[Bua]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-898	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[Oct]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-899	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[AdamantC]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-900	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[Me3AdamantC]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-901	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[AdamantPro]Lys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-902	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[35CF3PhPr]Lys-

	NH2
I-903	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[1NapPr]Lys-NH2
I-904	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[22PhPr]Lys-NH2
I-905	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[MorphAc]Lys-NH2
I-906	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[MePipAc]Lys-NH2
I-907	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[MeBipipAc]Lys-NH2
I-908	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[4MePipBz]Lys-NH2
I-909	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[MeMorphBz]Lys-NH2
I-910	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[Me2NCBz]Lys-NH2
I-911	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[mPEG2]Lys-NH2
I-912	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[mPEG4]Lys-NH2
I-913	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[mPEG6]Lys-NH2
I-914	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[mPEG8]Lys-NH2
I-915	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[2Napc]Lys-NH2
I-916	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[1Napc]Lys-NH2
I-917	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[Bua]Lys-NH2
I-918	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[Oct]Lys-NH2
I-919	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[AdamantC]Lys-NH2
I-920	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[Me3AdamantC]Lys-NH2
I-921	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-922	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-923	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Gln-NH2
I-924	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-2BrF-BztA-Gln-NH2
I-925	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3ClF-BztA-Gln-NH2
I-926	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3ClF-BztA-Gln-NH2
I-927	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-2F3MeF-BztA-Gln-NH2
I-928	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-2F3MeF-BztA-Gln-NH2
I-929	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-2ClF-BztA-Gln-NH2
I-930	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-931	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-S8-2ClF-BztA-Gln-NH2
I-932	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-2BrF-BztA-Gln-NH2
I-933	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-3ClF-BztA-Gln-NH2
I-934	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-S8-2F3MeF-BztA-Gln-NH2
I-935	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[PropynPEG1]Lys-NH2
I-936	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[PropynPEG2]Lys-NH2
I-937	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[PropynPEG3]Lys-NH2
I-938	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-[PropynPEG4]Lys-NH2

I-939	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-Lys-NH2
I-940	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ser-NH2
I-941	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ser-NH2
I-942	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Thr-NH2
I-943	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Thr-NH2
I-944	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ala-NH2
I-945	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ala-NH2
I-946	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Leu-NH2
I-947	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Leu-NH2
I-948	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-dThr-NH2
I-949	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-dThr-NH2
I-950	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Hse-NH2
I-951	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Hse-NH2
I-952	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Tyr-NH2
I-953	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Tyr-NH2
I-954	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Ser-NH2
I-955	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Ser-NH2
I-956	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Ser-NH2
I-957	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Ser-NH2
I-958	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Ser-NH2
I-959	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Ser-NH2
I-960	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-961	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-962	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ser-NH2
I-963	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ser-NH2
I-964	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-965	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-966	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Gln-NH2
I-967	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Gln-NH2
I-968	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-969	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-970	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-971	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-972	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-973	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-974	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Ser-NH2
I-975	Ac-PL3-Asp-Npg-B5-Asp-EtGA-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Ser-NH2
I-976	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-977	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-978	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Gln-NH2
I-979	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Gln-NH2

I-980	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-981	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-982	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ser-NH2
I-983	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ser-NH2
I-984	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Ser-NH2
I-985	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Ser-NH2
I-986	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-987	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-988	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-Phe-BztA-Gln-NH2
I-989	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-Tyr-BztA-Gln-NH2
I-990	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Ser-NH2
I-991	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Thr-NH2
I-992	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Hse-NH2
I-993	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Hse-PyrS2-2ClF-BztA-Hse-NH2
I-994	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-S8-2ClF-BztA-Gln-NH2
I-995	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Ser-S8-2ClF-BztA-Gln-NH2
I-996	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Hse-S8-2ClF-BztA-Gln-NH2
I-997	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-S8-2ClF-BztA-Hse-NH2
I-998	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Ser-S8-2ClF-BztA-Hse-NH2
I-999	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Ser-S8-2ClF-BztA-Hse-NH2
I-1000	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Hse-S8-2ClF-BztA-Hse-NH2
I-1001	Ac-PL3-Asp-Npg-B5-3Thi-TfeGA-Ala-Ala-Phe-Asn-PyrS2-Asp-BztA-Gln-NH2
I-1002	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Leu-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1003	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Phe-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1004	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ser-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1005	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ile-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1006	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Lys-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1007	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Leu-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1008	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Phe-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1009	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ser-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1010	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ile-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1011	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Lys-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1012	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Gln-6AmHex
I-1013	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1014	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1015	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Ser-NH2
I-1016	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Ser-NH2
I-1017	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1018	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1019	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Ser-NH2
I-1020	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Ser-NH2

I-1021	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2FF-BztA-Gln-NH2
I-1022	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Thr-PyrS2-2FF-BztA-Gln-NH2
I-1023	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2FF-BztA-Ser-NH2
I-1024	Ac-PL3-Asp-Npg-B5-Asp-Asn-Ala-Ala-Phe-Thr-PyrS2-2FF-BztA-Ser-NH2
I-1025	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-OH
I-1026	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-OH
I-1027	Ac-PL3-Phe-Npg-B5-Asp-Asp-Ala-Ala-Asp-Asn-PyrS2-3Thi-BztA-Gln-OH
I-1028	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1029	Ac-PL3-Glu-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1030	Ac-PL3-Asp-Npg-B5-Glu-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1031	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1032	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-dThr-NH2
I-1033	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-dThr-NH2
I-1034	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-dThr-NH2
I-1035	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-dThr-NH2
I-1036	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-dThr-NH2
I-1037	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-dThr-NH2
I-1038	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-dThr-NH2
I-1039	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-dThr-NH2
I-1040	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1041	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1042	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1043	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1044	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1045	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1046	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Ser-NH2
I-1047	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Ser-NH2
I-1048	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Ser-NH2
I-1049	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Ser-NH2
I-1050	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Ser-NH2
I-1051	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Ser-NH2
I-1052	AzAc-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1053	AzAc-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1054	AzAc-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1055	AzAc-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-His-NH2
I-1056	AzAc-PL3-Asp-Npg-B5-3Thi-TfeGA-Ala-Ala-Phe-Asn-PyrS2-Asp-BztA-Gln-NH2
I-1057	AzAc-PL3-Asp-Npg-B5-3Thi-TfeGA-Ala-Ala-Phe-Asn-PyrS2-Asp-BztA-Gln-NH2
I-1058	AzAc-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-dThr-NH2
I-1059	AzAc-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1060	AzAc-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-dThr-NH2
I-1061	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-6AmHex

I-1062	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1063	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1064	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1065	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1066	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1067	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1068	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Thr-NH2
I-1069	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Thr-NH2
I-1070	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Thr-NH2
I-1071	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Thr-NH2
I-1072	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1073	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1074	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1075	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1076	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1077	Ac-PL3-Asp-Cha-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1078	Ac-PL3-Asp-Cha-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1079	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NHEt
I-1080	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Leuol
I-1081	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Alaol
I-1082	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Throl
I-1083	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Pheol
I-1084	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Prool
I-1085	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Gln-6AzHex
I-1086	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1087	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1088	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1089	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1090	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Thr-NH2
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I-1098	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-2ClF-BztA-dThr-NH2
I-1099	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-Phe-BztA-Ser-NH2
I-1100	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-Phe-BztA-Ser-NH2
I-1101	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2FF-BztA-Ser-NH2
I-1102	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2FF-BztA-Ser-NH2

I-1103	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2OMeF-BztA-Ser-NH2
I-1104	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2OMeF-BztA-Ser-NH2
I-1105	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Cha-Ser-PyrS2-Phe-BztA-Ser-NH2
I-1106	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-Cha-BztA-Ser-NH2
I-1107	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Cha-PyrS2-2ClF-BztA-Gln-NH2
I-1108	Ac-PL3-Asp-1NapA-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1109	Ac-PL3-Asp-2NapA-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1110	Ac-PL3-Asp-1NapA-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
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I-1112	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1113	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Cha-PyrS2-2ClF-BztA-Ser-NH2
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I-1117	Ac-PL3-Asp-2NapA-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1118	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-3OMeF-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1119	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-3F3MeF-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1120	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-4F3MeF-Ser-PyrS2-2ClF-BztA-Gln-NH2
I-1121	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-3OMeF-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1122	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-3F3MeF-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1123	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-4F3MeF-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1124	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-3OMeF-Ser-PyrS2-Phe-BztA-Gln-NH2
I-1125	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-3F3MeF-Ser-PyrS2-Phe-BztA-Gln-NH2
I-1126	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-4F3MeF-Ser-PyrS2-Phe-BztA-Gln-NH2
I-1127	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-3OMeF-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1128	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-3F3MeF-Leu-PyrS2-Phe-BztA-Gln-NH2
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I-1158	Ac-PL3-Asp-Phe-B5-Asp-Asp-Leu-Leu-Phe-Thr-PyrS2-2ClF-BztA-Ser-NH2
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I-1162	Ac-PL3-NMeD-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1163	Ac-PL3-RbGlu-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1164	Ac-PL3-RbGlu-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
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I-1167	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1168	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
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I-1175	Ac-PL3-Asp-Cha-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1176	Ac-PL3-Asp-Cha-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1177	Ac-PL3-Asp-Npg-B5-Asp-Asp-Aib-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1178	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Aib-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1179	Ac-PL3-Asp-Npg-B5-Asp-Asp-Aib-Aib-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1180	Ac-PL3-Asp-Npg-B5-Asp-Asp-Aib-Aib-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1181	Ac-Pro-Asp-Npg-R5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1182	Ac-Pro-Asp-Npg-R5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1183	Ac-Pro-Asp-Npg-R5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1184	Ac-Pro-Asp-Cha-R5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Ser-NH2

I-1185	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Pff-BztA-Gln-NH2
I-1186	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-Pff-BztA-Gln-NH2
I-1187	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-Pff-BztA-Ser-NH2
I-1188	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-3Thi-BztA-Gln-NH2
I-1189	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-2ClF-BztA-Ser-NH2
I-1190	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-3Thi-BztA-Ser-NH2
I-1191	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-3Thi-BztA-Thr-NH2
I-1192	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-2ClF-BztA-4TriA-NH2
I-1193	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-3Thi-BztA-4TriA-NH2
I-1194	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-2ClF-BztA-His-NH2
I-1195	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-3Thi-BztA-His-NH2
I-1196	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-2ClF-BztA-Hse-NH2
I-1197	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-3Thi-BztA-Hse-NH2
I-1198	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-2ClF-BztA-dGln-NH2
I-1199	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S8-3Thi-BztA-dGln-NH2
I-1200	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-2CNF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1201	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-3CNF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1202	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-4CNF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1203	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2CNF-BztA-Gln-NH2
I-1204	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3CNF-BztA-Gln-NH2
I-1205	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-4CNF-BztA-Gln-NH2
I-1206	Ac-PL3-Asp-Npg-B5-Asn-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1207	Ac-PL3-Asp-Npg-B5-Asn-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1208	Ac-PL3-Asp-Npg-B5-Ser-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1209	Ac-PL3-Asp-Npg-B5-Ser-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1210	Ac-PL3-Asp-Npg-B5-Gln-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1211	Ac-PL3-Asp-Npg-B5-Gln-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1212	Ac-PL3-Asp-Npg-B5-Leu-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1213	Ac-PL3-Asp-Npg-B5-Leu-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1214	Ac-PL3-Asp-Npg-B5-Hse-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1215	Ac-PL3-Asp-Npg-B5-Hse-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1216	Ac-PL3-Asp-Npg-B5-Dab-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1217	Ac-PL3-Asp-Npg-B5-Dab-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1218	MeSO2-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1219	MeSO2-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1220	Ac-PL3-Asn-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1221	Ac-PL3-Asn-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1222	Ac-PL3-Ser-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1223	Ac-PL3-Ser-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1224	Ac-PL3-Gln-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1225	Ac-PL3-Gln-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2

I-1226	Ac-PL3-Leu-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1227	Ac-PL3-Leu-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1228	Ac-PL3-Hse-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1229	Ac-PL3-Hse-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1230	Ac-PL3-Dab-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1231	Ac-PL3-Dab-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1232	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-3Thi-1NapA-Gln-NH2
I-1233	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-3Thi-2NapA-Gln-NH2
I-1234	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-1NapA-Gln-NH2
I-1235	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-2NapA-Gln-NH2
I-1236	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-1NapA-Gln-NH2
I-1237	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-2NapA-Gln-NH2
I-1238	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-1NapA-Ser-NH2
I-1239	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-2NapA-Ser-NH2
I-1240	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NHEt
I-1241	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Throl
I-1242	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Alaol
I-1243	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Leuol
I-1244	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Ser-NHEt
I-1245	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Throl
I-1246	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Alaol
I-1247	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Leuol
I-1248	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NHEt
I-1249	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Throl
I-1250	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Alaol
I-1251	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leuol
I-1252	Oct-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1253	mPEG2-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1254	Oct-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1255	mPEG2-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1256	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS1-2ClF-BztA-dThr-NH2
I-1257	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NHBn
I-1258	MeSO2-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1259	MeOPr-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dThr-NH2
I-1260	MeSO2-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1261	MeOPr-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Gln-NH2
I-1262	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S10-2ClF-BztA-Thr-NH2
I-1263	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-Phe-BztA-Ser-NH2
I-1264	Ac-PL3-Asp-Npg-B5-Asp-Thr-Leu-Ala-Phe-Thr-PyrS2-Phe-BztA-Ser-NH2
I-1265	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Leu-Phe-Thr-PyrS2-Phe-BztA-Ser-NH2
I-1266	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-1NapA-Thr-PyrS2-Phe-BztA-Ser-NH2

I-1267	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-2NapA-Thr-PyrS2-Phe-BztA-Ser-NH2
I-1268	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-3F3MeF-Thr-PyrS2-Phe-BztA-Ser-NH2
I-1269	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-1NapA-BztA-Ser-NH2
I-1270	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-2NapA-BztA-Ser-NH2
I-1271	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-3F3MeF-BztA-Ser-NH2
I-1272	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-Phe-1NapA-Ser-NH2
I-1273	Ac-PL3-Asp-Npg-B5-Asp-Asp-iPrLys-Ala-Phe-Thr-PyrS2-2ClF-BztA-Thr-NH2
I-1274	Ac-PL3-Asp-Npg-B5-Asp-Asp-iPrLys-Ala-Phe-Thr-PyrS2-2ClF-BztA-Leu-NH2
I-1275	Ac-PL3-Asp-Npg-B5-Asp-Asp-iPrLys-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1276	Ac-PL3-Asp-Npg-B5-Asp-Asp-iPrLys-Ala-Phe-Leu-PyrS2-2ClF-BztA-Thr-NH2
I-1277	Ac-PL3-Asp-Npg-B5-Asp-Asp-iPrLys-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1278	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-iPrLys-PyrS2-2ClF-BztA-Gln-NH2
I-1279	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-iPrLys-PyrS2-2ClF-BztA-Thr-NH2
I-1280	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-iPrLys-PyrS2-2ClF-BztA-Leu-NH2
I-1281	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-iPrLys-PyrS2-2ClF-BztA-Gln-NH2
I-1282	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-iPrLys-PyrS2-2ClF-BztA-Thr-NH2
I-1283	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-iPrLys-PyrS2-2ClF-BztA-Leu-NH2
I-1284	Ac-PL3-Asn-Npg-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1285	Ac-PL3-Asn-Npg-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1286	Ac-PL3-Asn-Ala-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1287	Ac-PL3-Asn-Ala-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1288	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1289	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1290	Ac-PL3-Asn-Npg-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-1NapA-Gln-NH2
I-1291	Ac-PL3-Asn-Npg-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-2NapA-Gln-NH2
I-1292	Ac-PL3-Asn-Npg-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-2NapA-Gln-NH2
I-1293	Ac-PL3-Asn-Npg-B5-Asp-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Thr-NH2
I-1294	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1295	Ac-PL3-Asp-Ala-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1296	Ac-PL3-Asp-Ala-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1297	Ac-PL3-Asp-Npg-B5-Asn-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1298	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-1NapA-Gln-NH2
I-1299	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Thr-NH2
I-1300	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Thr-NH2
I-1301	Ac-PL3-Asn-Npg-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1302	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Throl
I-1303	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Throl
I-1304	Ac-PL3-Asn-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Throl
I-1305	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Throl
I-1306	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Throl
I-1307	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Throl

I-1308	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Thr-S8-2ClF-BztA-Throl
I-1309	Ac-PL3-Asp-Npg-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Throl
I-1310	Ac-PL3-Asp-Cha-B5-Asp-Thr-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Throl
I-1311	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Throl
I-1312	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Throl
I-1313	Ac-PL3-Asp-Npg-B5-Asp-Asp-iPrLys-Ala-Phe-Leu-PyrS2-2ClF-BztA-Throl
I-1314	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2cbmF-BztA-Gln-NH2
I-1315	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2cbmF-BztA-Gln-NH2
I-1316	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2cbmF-BztA-Gln-NH2
I-1317	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2F3MeF-BztA-Gln-NH2
I-1318	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-1319	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-Gln-NH2
I-1320	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2FF-BztA-Gln-NH2
I-1321	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2FF-BztA-Gln-NH2
I-1322	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2FF-BztA-Gln-NH2
I-1323	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2BrF-BztA-Gln-NH2
I-1324	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2BrF-BztA-Gln-NH2
I-1325	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2BrF-BztA-Gln-NH2
I-1326	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2MeF-BztA-Gln-NH2
I-1327	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2OMeF-BztA-Gln-NH2
I-1328	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2OMeF-BztA-Gln-NH2
I-1329	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-Cha-BztA-Gln-NH2
I-1330	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Cha-BztA-Gln-NH2
I-1331	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-Cha-BztA-Gln-NH2
I-1332	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1333	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1334	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Throl
I-1335	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-1336	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-1337	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Throl
I-1338	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Gln-NH2
I-1339	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Ser-NH2
I-1340	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Throl
I-1341	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-Gln-NH2
I-1342	PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-Ser-NH2
I-1343	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-Throl
I-1344	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2Thi-BztA-Gln-NH2
I-1345	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2Thi-BztA-Gln-NH2
I-1346	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-dPhe-BztA-Gln-NH2
I-1347	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-dPhe-BztA-Gln-NH2
I-1348	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-dPhe-BztA-Gln-NH2

I-1349	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-hPhe-BztA-Gln-NH2
I-1350	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-hPhe-BztA-Gln-NH2
I-1351	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-hPhe-BztA-Gln-NH2
I-1352	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-CypA-BztA-Gln-NH2
I-1353	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-CypA-BztA-Gln-NH2
I-1354	NdiMeButC-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-Phe-BztA-Ser-NH2
I-1355	Oct-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-Phe-BztA-Ser-NH2
I-1356	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-Phe-BztA-Ser-NH2
I-1357	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Ser-PyrS2-Phe-BztA-Ser-NH2
I-1358	NdiMeButC-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1359	NdiMeButC-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1360	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1361	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1362	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1363	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-2F3MeF-PyrS2-3Thi-BztA-Gln-NH2
I-1364	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-3F3MeF-PyrS2-3Thi-BztA-Gln-NH2
I-1365	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-4F3MeF-PyrS2-3Thi-BztA-Gln-NH2
I-1366	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Gln-NH2
I-1367	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-2F3MeF-PyrS2-2ClF-BztA-Gln-NH2
I-1368	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-3F3MeF-PyrS2-2ClF-BztA-Gln-NH2
I-1369	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-4F3MeF-PyrS2-2ClF-BztA-Gln-NH2
I-1370	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-2F3MeF-PyrS2-3Thi-BztA-Throl
I-1371	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-3F3MeF-PyrS2-3Thi-BztA-Throl
I-1372	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-4F3MeF-PyrS2-3Thi-BztA-Throl
I-1373	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NEt2
I-1374	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NHCyHe
I-1375	PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NHCyPr
I-1376	Ac-PL3-Asp-Ala-B5-Asn-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1377	Ac-PL3-Asp-Ala-B5-Asn-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-1378	Ac-PL3-Asp-Ala-B5-Asn-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Thr-NH2
I-1379	Ac-PL3-Asp-Ala-B5-Asn-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1380	Ac-PL3-Asp-Ala-B5-Asn-Lys-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1381	Ac-PL3-Asp-Ala-B5-Asn-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-2NapA-Gln-NH2
I-1382	Ac-PL3-Asn-Ala-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1383	Ac-PL3-Asn-Ala-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-1384	Ac-PL3-Asn-Ala-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Thr-NH2
I-1385	Ac-PL3-Asn-Ala-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1386	Ac-PL3-Asn-Ala-B5-Asp-Lys-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1387	Ac-PL3-Asn-Ala-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-2NapA-Gln-NH2
I-1388	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1389	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-3Thi-BztA-Gln-NH2

I-1390	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-3Thi-BztA-Throl
I-1391	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-2Thi-BztA-Gln-NH2
I-1392	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-2Thi-BztA-Gln-NH2
I-1393	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-2Thi-BztA-Throl
I-1394	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-2ClF-BztA-Gln-NH2
I-1395	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-2ClF-BztA-Gln-NH2
I-1396	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S8-2F3MeF-BztA-Gln-NH2
I-1397	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-2F3MeF-BztA-Gln-NH2
I-1398	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-2F3MeF-BztA-Throl
I-1399	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1400	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1401	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-nLeu-PyrS2-3Thi-BztA-Gln-NH2
I-1402	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1403	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1404	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-nLeu-PyrS2-Phe-BztA-Gln-NH2
I-1405	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-nLeu-PyrS2-Phe-BztA-Gln-NH2
I-1406	Ac-PL3-Asp-Leu-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1407	Ac-PL3-Asp-Leu-B5-Asp-3COOHF-Ala-Ala-Phe-nLeu-PyrS2-3Thi-BztA-Gln-NH2
I-1408	Ac-PL3-Asp-nLeu-B5-Asp-3COOHF-Ala-Ala-Phe-nLeu-PyrS2-3Thi-BztA-Gln-NH2
I-1409	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1410	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1411	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1412	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1413	Ac-PL3-Asp-Asn-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1414	Ac-PL3-Asp-Ser-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1415	Ac-PL3-Asp-Thr-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1416	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1417	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1418	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1419	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1420	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1421	Ac-PL3-Asp-nLeu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1422	Ac-PL3-Asp-Asn-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1423	Ac-PL3-Asp-Ser-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1424	Ac-PL3-Asp-Thr-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Leu-NH2
I-1425	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-23FF-Gln-NH2
I-1426	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-23FF-Ser-NH2
I-1427	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-34FF-Gln-NH2
I-1428	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-34FF-Ser-NH2
I-1429	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-34OMeF-Gln-NH2
I-1430	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-34OMeF-Ser-NH2

I-1431	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-Trp-Gln-NH2
I-1432	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-Trp-Ser-NH2
I-1433	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-1MeW-Gln-NH2
I-1434	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-1MeW-Ser-NH2
I-1435	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-6ClW-Gln-NH2
I-1436	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-6ClW-Ser-NH2
I-1437	Ac-PL3-Asp-Npg-B5-Asp-Glu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1438	Ac-PL3-Asp-Npg-B5-Asp-Aad-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1439	Ac-PL3-Asp-Npg-B5-Asp-Trp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1440	Ac-PL3-Asp-Npg-B5-Asp-Gln-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1441	Ac-PL3-Asp-Npg-B5-Asp-Phe-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1442	Ac-PL3-Asp-Npg-B5-Asp-Val-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1443	Ac-PL3-Asp-Npg-B5-Asp-Ser-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1444	Ac-PL3-Asp-Npg-B5-Asp-Leu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1445	Ac-PL3-Asp-Npg-B5-Asp-1AcAW-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1446	Ac-PL3-Asp-Npg-B5-Asp-[Tfb]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1447	Ac-PL3-Asp-Npg-B5-Asp-[Bn]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1448	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1449	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1450	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1451	Ac-PL3-Asp-Npg-B5-Asp-[iPr]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1452	Ac-PL3-Asp-Npg-B5-Asp-[iPr]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1453	Ac-PL3-Asp-Npg-B5-Asp-[iPr]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1454	Ac-PL3-Asp-Npg-B5-Asp-[Tfb]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1455	Ac-PL3-Asp-Npg-B5-Asp-[Tfb]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1456	Ac-PL3-Asp-Npg-B5-Asp-[Bn]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1457	Ac-PL3-Asp-Npg-B5-Asp-[Tfp]Dap-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1458	Ac-PL3-Asp-Leu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1459	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-1460	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-1461	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1462	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1463	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1464	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1465	Ac-PL3-Asp-Npg-B5-Asn-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1466	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-1467	Ac-PL3-Asp-Npg-B5-Asp-Asp-[CH2NMe2]4SEF-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln
I-1468	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-[CH2NMe2]4SEF-Leu-PyrS2-Phe-BztA-Gln
I-1469	Ac-PL3-Asp-[lithocholate]-Lys-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1470	Ac-PL3-Asp-[lithocholate-PEG2]-Lys-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1471	Ac-PL3-Asp-[Me3AdamantC]-Lys-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2

I-1472	Ac-PL3-Asp-[Me3AdamantC-PEG2]-Lys-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1473	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[lithocholate]-Lys-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1474	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[lithocholate-PEG2]-Lys-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1475	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[Me3AdamantC]-Lys-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1476	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-[Me3AdamantC-PEG2]-Lys-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1477	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-[lithocholate]-Lys-NH2
I-1478	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-[lithocholate-PEG2]-Lys-NH2
I-1479	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-[Me3AdamantC]-Lys-NH2
I-1480	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-[Me3AdamantC-PEG2]-Lys-NH2
I-1481	Ac-PL3-Asp-Npg-B5-Asp-Asp-MorphNva-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1482	Ac-PL3-Asp-Npg-B5-Asp-Asp-F2PipNva-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1483	Ac-PL3-Asp-Npg-B5-Asp-Asp-MorphAsn-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1484	Ac-PL3-Asp-Npg-B5-Asp-Asp-MePpzAsn-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1485	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-MorphNva-PyrS2-3Thi-BztA-Gln-NH2
I-1486	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-F2PipNva-PyrS2-3Thi-BztA-Gln-NH2
I-1487	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-MorphAsn-PyrS2-3Thi-BztA-Gln-NH2
I-1488	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-MePpzAsn-PyrS2-3Thi-BztA-Gln-NH2
I-1489	Ac-PL3-Asp-Npg-B5-Asp-Asp-[3Py]4SF-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1490	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-[3Py]4SF-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1491	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Hse-S8-2ClF-BztA-Throl
I-1492	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-NH2
I-1493	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-1494	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Thr-NH2
I-1495	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-1496	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1497	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Trp-NH2
I-1498	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-4TriA-NH2
I-1499	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Hse-NH2
I-1500	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-dGln-NH2
I-1501	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-MorphNva-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1502	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-F2PipNva-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1503	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-MePpzNva-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1504	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-MorphAbu-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1505	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-F2PipAbu-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1506	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-MePpzAbu-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1507	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-MorphAsn-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1508	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-MePpzAsn-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2

I-1509	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1510	Ac-PL3-Asp-Phe-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Hse-NH2
I-1511	Ac-PL3-Asp-Tyr-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1512	Ac-PL3-Asp-Tyr-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Hse-NH2
I-1513	Ac-PL3-Asp-Ser-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1514	Ac-PL3-Asp-Ser-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Hse-NH2
I-1515	Ac-PL3-Asp-Thr-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1516	Ac-PL3-Asp-Thr-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Hse-NH2
I-1517	Ac-PL3-Asp-Asn-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1518	Ac-PL3-Asp-Asn-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Hse-NH2
I-1519	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1520	Ac-PL3-Asp-Cha-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Hse-NH2
I-1521	Ac-PL3-Asp-nLeu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1522	Ac-PL3-Asp-nLeu-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1523	Ac-PL3-Asp-nLeu-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1524	Ac-PL3-Asp-nLeu-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1525	Ac-PL3-Asp-nLeu-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1526	Ac-PL3-Asp-Ser-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1527	Ac-PL3-Asp-Ser-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1528	Ac-PL3-Asp-Ser-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1529	Ac-PL3-Asp-Ser-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1530	Ac-PL3-Asp-Ser-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1531	Ac-PL3-Asp-Asn-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1532	Ac-PL3-Asp-Asn-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1533	Ac-PL3-Asp-Asn-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1534	Ac-PL3-Asp-Asn-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1535	Ac-PL3-Asp-Asn-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1536	Ac-PL3-Asp-Hleu-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1537	Ac-PL3-Asp-Hleu-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1538	Ac-PL3-Asp-Hleu-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1539	Ac-PL3-Asp-Gln-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1540	Ac-PL3-Asp-Gln-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1541	Ac-PL3-Asp-Gln-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1542	Ac-PL3-Asp-Gln-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1543	Ac-PL3-Asp-Gln-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1544	Ac-PL3-Asp-Hse-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1545	Ac-PL3-Asp-Hse-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1546	Ac-PL3-Asp-Hse-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1547	Ac-PL3-Asp-Hse-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1548	Ac-PL3-Asp-Hse-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1549	Ac-PL3-Asp-Phe-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1550	Ac-PL3-Asp-Phe-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1551	Ac-PL3-Asp-Phe-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2

I-1552	Ac-PL3-Asp-Lys-B5-Asp-Glu-Ala-Ala-Phe-Gln-S8-Phe-BztA-Gln-NH2
I-1553	Ac-PL3-Asp-Lys-B5-Asp-Glu-Ala-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
I-1554	Ac-PL3-Asp-Lys-B5-Asp-Glu-Ala-Ala-Phe-Hse-S8-Phe-BztA-Gln-NH2
I-1555	Ac-PL3-Asp-Npg-B5-Asn-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1556	Ac-PL3-Asp-Ala-B5-Asn-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1557	Ac-PL3-Asp-Npg-B5-Asn-Asn-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1558	Ac-PL3-Asp-Npg-B5-Gln-Gln-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1559	Ac-PL3-Asp-Npg-B5-Thr-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1560	Ac-PL3-Asp-Npg-B5-Gln-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1561	Ac-PL3-Asp-Npg-B5-Ser-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1562	Ac-PL3-Asp-Npg-B5-Leu-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1563	Ac-PL3-Asp-Npg-B5-Leu-Asn-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1564	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1565	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1566	Ac-PL3-Asp-Npg-B5-Asn-Gln-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1567	Ac-PL3-Asp-Npg-B5-Asn-Gln-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1568	Ac-PL3-Asp-Npg-B5-Asn-Tyr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1569	Ac-PL3-Asp-Npg-B5-Asn-Tyr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1570	Ac-PL3-Asp-Npg-B5-Asn-Leu-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1571	Ac-PL3-Asp-Npg-B5-Asp-[Pfb]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1572	Ac-PL3-Asp-Npg-B5-Asp-GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1573	Ac-HypEs5-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1574	MeSO2-HypEs5-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1575	Ac-HypEs4-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1576	ProSAm3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1577	ProSAm3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1578	Ac-PL3-Asp-Npg-B5-Asp-3TzF-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1579	Ac-PL3-Asp-Npg-B5-Asp-4TzF-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1580	Ac-PL3-Asn-Phe-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1581	Ac-PL3-Asn-Trp-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1582	Ac-PL3-Asn-Leu-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1583	Ac-PL3-Asn-Ser-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1584	Ac-PL3-Asn-Gln-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1585	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-Tyr-Gln-NH2
I-1586	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-5ClW-Gln-NH2
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I-1589	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-1MeW-Gln-NH2
I-1590	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Tyr-Trp-Gln-NH2
I-1591	Ac-PL3-Asn-iPrLys-B5-Asp-Thr-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1592	Ac-PL3-Asn-Npg-B5-Asp-3cbmf-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1593	Ac-PL3-Asn-Npg-B5-Asp-Phe-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1594	Ac-PL3-Asn-Npg-B5-Asp-Npg-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2

I-1595	Ac-PL3-Asn-Npg-B5-Asp-3F3MeF-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1596	Ac-PL3-Asn-Npg-B5-Asp-Ala-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1597	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Ser-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1598	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Npg-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1599	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Phe-PyrS2-Phe-BztA-Gln-NH2
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I-1601	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Ser-PyrS2-Phe-BztA-Gln-NH2
I-1602	Ac-PL3-Asn-Npg-B5-Asp-Thr-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Gln-NH2
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I-1605	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1606	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
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I-1608	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-F2PipNva-NH2
I-1609	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-MorphNva-NH2
I-1610	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-MorphNva-NH2
I-1611	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-MePpzAsn-NH2
I-1612	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-MePpzAsn-NH2
I-1613	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-MorphAsn-NH2
I-1614	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-MorphAsn-NH2
I-1615	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-iPrLys-NH2
I-1616	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-iPrLys-NH2
I-1617	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1618	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1619	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-nLeu-PyrS2-3Thi-BztA-Gln-NH2
I-1620	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-hLeu-PyrS2-3Thi-BztA-Gln-NH2
I-1621	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-1622	Ac-PL3-Asp-Npg-B5-Asp-[Et]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1623	Ac-PL3-Asp-Npg-B5-Asp-[sBu]GA-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1624	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1625	Ac-PL3-Asp-Npg-B5-Asp-[Tfp]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1626	Ac-PL3-Asp-Npg-B5-Asp-[sBu]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1627	Ac-PL3-Asp-Npg-B5-Asp-[Et]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1628	Ac-PL3-Asp-Npg-B5-Asp-[Et]GA-Ala-Ala-Phe-Asn-S8-3Thi-BztA-Gln-NH2
I-1629	Ac-PL3-Asp-Npg-B5-Asp-[Tfb]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1630	Ac-PL3-Asp-Npg-B5-Asp-[Bn]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1631	Ac-PL3-Asp-Npg-B5-Asp-[Me]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1632	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1633	Ac-PL3-Asp-Npg-B5-Asp-[Tfp]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1634	Ac-PL3-Asp-Npg-B5-Asp-[Tfb]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2

I-1635	Ac-PL3-Asp-Npg-B5-Asp-[Bn]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1636	Ac-PL3-Asp-Npg-B5-Asp-[Me]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1637	Ac-PL3-Asp-Npg-B5-Asp-[Me]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1638	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1639	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1640	Ac-PL3-Asp-Npg-B5-Asp-[Tfp]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1641	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NEt2
I-1642	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NHCyHe
I-1643	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-1644	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Npg-NH2
I-1645	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-iPrLys-NH2
I-1646	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Hse-NH2
I-1647	Ac-PL3-Asn-Tyr-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1648	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1649	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Cha-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1650	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-Cha-PyrS2-Phe-BztA-Gln-NH2
I-1651	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Cha-BztA-Gln-NH2
I-1652	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Cha-NH2
I-1653	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-iPrLys-PyrS2-Phe-BztA-Gln-NH2
I-1654	Ac-PL3-Asn-Npg-B5-Asp-Gln-iPrLys-Ala-Phe-iPrLys-PyrS2-Phe-BztA-iPrLys-NH2
I-1655	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-Gln-NH2
I-1656	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-1657	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Gln-NH2
I-1658	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1659	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-Ser-NH2
I-1660	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-1661	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-1662	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Ser-NH2
I-1663	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1664	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ser-NH2
I-1665	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ser-NH2
I-1666	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-1667	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-1668	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Throl
I-1669	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Throl
I-1670	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Throl
I-1671	Ac-PL3-Asp-Npg-B5-Asp-2COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Throl
I-1672	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NHEt
I-1673	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-Alaol
I-1674	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-Pheol
I-1675	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-Prool
I-1676	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-Leuol
I-1677	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-Throl

I-1678	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NHEt
I-1679	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-Alaol
I-1680	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-Pheol
I-1681	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-Prool
I-1682	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-Leuol
I-1683	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-Throl
I-1684	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gly-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1685	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-nLeu-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1686	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1687	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Gly-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1688	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-nLeu-Gly-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1689	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Gly-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1690	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Gly-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1691	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Gly-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1692	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-nLeu-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1693	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Aib-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1694	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Gly-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1695	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-nLeu-Gly-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1696	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Aib-Gly-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1697	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS3-3Thi-BztA-Gln-NH2
I-1698	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-S8-3Thi-BztA-Gln-NH2
I-1699	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Hse-PyrS2-2ClF-BztA-Hse-NH2
I-1700	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1701	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3PyrA-BztA-Gln-NH2
I-1702	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-2CNF-BztA-Gln-NH2
I-1703	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-CypA-BztA-Gln-NH2
I-1704	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-1705	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-NH2
I-1706	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Thr-NH2
I-1707	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-2cbmf-NH2
I-1708	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-3cbmf-NH2
I-1709	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-AcLys-NH2
I-1710	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-1711	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-1712	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-2CNF-BztA-Gln-NH2
I-1713	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-CypA-BztA-Gln-NH2
I-1714	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-1715	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-NH2
I-1716	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Thr-NH2
I-1717	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-2cbmf-NH2
I-1718	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-3cbmf-NH2
I-1719	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-AcLys-NH2
I-1720	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2

I-1721	Ac-PL3-AspSH-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1722	Ac-PL3-AspSH-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1723	Ac-PL3-[EtSSpy]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1724	Ac-PL3-[EtSSpy]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1725	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-2MeF-BztA-Gln-NH2
I-1726	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-2MeF-BztA-Gln-NH2
I-1727	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-2NH2F-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1728	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-2NH2F-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1729	Ac-PL3-Asp-Npg-B5-Asp-[Ac]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1730	Ac-PL3-Asp-Npg-B5-Asp-[CF3CO]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1731	Ac-PL3-Asp-Npg-B5-Asp-GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1732	Ac-PL3-Asp-Npg-B5-Asp-GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1733	Ac-PL3-Asp-Npg-B5-Asp-GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1734	Ac-PL3-Asp-Npg-B5-Asp-[Pfb]GA-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1735	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-Phe-BztA-Gln-NH2
I-1736	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-2Thi-BztA-Gln-NH2
I-1737	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-2MeF-BztA-Gln-NH2
I-1738	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-2F3MeF-BztA-Gln-NH2
I-1739	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3MeF-BztA-Gln-NH2
I-1740	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Gln-NH2
I-1741	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Trp-PyrS2-3Thi-BztA-Gln-NH2
I-1742	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-NH2
I-1743	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Arg-NH2
I-1744	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Phe-NH2
I-1745	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Thr-NH2
I-1746	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Asn-NH2
I-1747	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1748	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1749	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1750	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1751	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-1752	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-1753	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1754	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Leu-NH2
I-1755	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1756	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Phe-NH2
I-1757	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-1758	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Val-NH2
I-1759	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1760	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Thr-PyrS2-3Thi-BztA-Leu-NH2
I-1761	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1762	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Thr-PyrS2-3Thi-BztA-Phe-NH2
I-1763	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2

I-1764	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Thr-PyrS2-3Thi-BztA-Val-NH2
I-1765	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-1766	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Thr-PyrS2-3Thi-BztA-Leu-NH2
I-1767	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1768	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Thr-PyrS2-3Thi-BztA-Phe-NH2
I-1769	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-1770	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-iPrLys-Ala-Phe-Thr-PyrS2-3Thi-BztA-Val-NH2
I-1771	Ac-PL3-Asp-Npg-B5-bMe2Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1772	Ac-PL3-Asp-Npa-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1773	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Npg-PyrS2-3Thi-BztA-Gln-NH2
I-1774	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Cha-PyrS2-3Thi-BztA-Gln-NH2
I-1775	Ac-PL3-Asp-Cha-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1776	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-nLeu-PyrS2-3Thi-BztA-Gln-NH2
I-1777	Ac-PL3-Asp-nLeu-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1778	Ac-PL3-Asp-Npg-S5-Asp-Asp-Ala-Ala-Phe-R5-Ala-3Thi-BztA-S5-Ala-NH2
I-1779	Ac-PL3-Asp-Npg-S5-Asp-Asp-Ala-Ala-Phe-R5-Ala-3Thi-BztA-S5-Ala-NH2
I-1780	Ac-PL3-Asp-Npg-S5-Asp-Asp-Aib-Ala-Phe-R5-Ala-3Thi-BztA-S5-Ala-NH2
I-1781	Ac-PL3-Asp-Npg-S5-Asp-Asp-Aib-Ala-Phe-R5-Ala-3Thi-BztA-S5-Ala-NH2
I-1782	Ac-PL3-Asp-Npg-S5-Asp-Asp-R5-Ala-Phe-Leu-Ala-3Thi-BztA-PyrS2-Ala-NH2
I-1783	Ac-PL3-Asp-Npg-B5-Asp-Tyr-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-1784	Ac-PL3-Asp-Npg-B5-Asp-Tyr-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1785	Ac-PL3-Asp-Npg-B5-Asp-hTyr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1786	Ac-PL3-Asp-Npg-B5-Asp-hTyr-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-1787	Ac-PL3-Asp-Npg-B5-Asp-hTyr-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1788	Ac-PL3-Asp-Npg-B5-Asp-Trp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1789	Ac-PL3-Asp-Npg-B5-Asp-Trp-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-1790	Ac-PL3-Asp-Npg-B5-Asp-Pff-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1791	Ac-PL3-Asp-Npg-B5-Asp-Pff-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-1792	Ac-PL3-Asp-Npg-B5-Asp-Pff-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1793	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-1794	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-Phe-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-1795	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1796	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1797	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[4Pippip]GlnR-NH2
I-1798	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[4Pippip]GlnR-NH2
I-1799	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[Me2NPrPip]GlnR-NH2
I-1800	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[Me2NPrPip]GlnR-NH2
I-1801	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[4MePpzPip]GlnR-NH2
I-1802	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[4MePpzPip]GlnR-NH2
I-1803	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[TfePpz]GlnR-NH2

I-1804	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[RDMAPyr]GlnR-NH2
I-1805	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[RDMAPyr]GlnR-NH2
I-1806	Ac-PL3-Asp-Npg-S5-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1807	Ac-PL3-Asp-Npg-S5-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1808	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1809	Ac-PL3-Asp-Npg-S5-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1810	Ac-Pro-Asp-Npg-R5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1811	Ac-PL3-Asp-Leu-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-Phe-Trp-Gln-NH2
I-1812	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS1-3Thi-BztA-Gln-NH2
I-1813	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS1-3Thi-BztA-Gln-NH2
I-1814	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS1-3Thi-BztA-Gln-NH2
I-1815	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS1-3Thi-BztA-Gln-NH2
I-1816	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS-3Thi-BztA-Gln-NH2
I-1817	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS-3Thi-BztA-Gln-NH2
I-1818	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS-3Thi-BztA-Gln-NH2
I-1819	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S7-3Thi-BztA-Gln-NH2
I-1820	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-S7-3Thi-BztA-Gln-NH2
I-1821	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS1-3Thi-BztA-Gln-NH2
I-1822	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS1-3Thi-BztA-Gln-NH2
I-1823	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS-3Thi-BztA-Gln-NH2
I-1824	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS-3Thi-BztA-Gln-NH2
I-1825	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-S7-3Thi-BztA-Gln-NH2
I-1826	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-Az-3Thi-BztA-Gln-NH2
I-1827	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-Az-3Thi-BztA-Gln-NH2
I-1828	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-Az-3Thi-BztA-Gln-NH2
I-1829	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-SdN-3Thi-BztA-Gln-NH2
I-1830	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-SdN-3Thi-BztA-Gln-NH2
I-1831	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-Az-3Thi-BztA-Gln-NH2
I-1832	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-Az-3Thi-BztA-Gln-NH2
I-1833	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1834	Ac-PL3-Asp-Npg-B5-Asp-[Bn]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1835	Ac-PL3-Asp-Npg-B5-Asp-[Et]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1836	Ac-PL3-Asp-Npg-B5-Asp-[CH2CO2H]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1837	Ac-PL3-Asp-Npg-B5-Asp-[Tfb]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1838	Ac-PL3-Asp-Npg-B5-Asp-[Pfbn]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1839	Ac-PL3-Asp-Npg-B5-Asp-[Tfp]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1840	Ac-PL3-Asp-Npg-B5-Asp-[Ac]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1841	Ac-PL3-Asp-Npg-B5-Asp-GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1842	Ac-PL3-Asp-Npg-B5-Asp-[MorphEt]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1843	Ac-PL3-Asp-Npg-B5-Asp-[2COOH4NO2Ph]Dap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2

I-1844	Ac-PL3-Asp-Npg-B5-Asp-[3COOH4NO2Ph]Dap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1845	Ac-PL3-Asp-Npg-B5-Asp-[2Nic]Dap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1846	Ac-HyPEs5-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1847	Ac-HypEs5-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1848	Ac-PL3-Asp-Npg-B5-Asp-[2COOH4NO2Ph]Cys-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1849	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-2ClF-BztA-Ser-NH2
I-1850	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Val-PyrS2-2ClF-BztA-Ser-NH2
I-1851	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-1852	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-NH2
I-1853	Ac-PL3-Asn-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1854	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-[CH2NMe2]TriAzDap-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1855	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-[CH2NMe2]TriAzDap-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1856	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-[CH2Ppz]TriAzDap-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1857	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-[CH2Ppz]TriAzDap-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1858	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-[MorphCH2]TriAzDap-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1859	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-[MorphCH2]TriAzDap-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1860	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-[SO2MorphCH2]TriAzDap-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1861	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[CH2NMe2]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1862	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[CH2NMe2]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1863	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[CH2Ppz]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1864	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[CH2Ppz]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1865	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[MorphCH2]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1866	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[MorphCH2]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1867	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[MorphCH2]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1868	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[SO2MorphCH2]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1869	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[SO2MorphCH2]TriAzDap-PyrS2-3Thi-BztA-Gln-NH2
I-1870	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-1NapA-Gln-NH2
I-1871	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-1NapA-Gln-NH2
I-1872	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-2NapA-Gln-NH2
I-1873	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-2NapA-Gln-NH2

I-1874	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-Cha-Gln-NH2
I-1875	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-Cha-Gln-NH2
I-1876	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-Trp-Gln-NH2
I-1877	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-Trp-Gln-NH2
I-1878	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Val-NH2
I-1879	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Val-NH2
I-1880	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Leu-NH2
I-1881	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Leu-NH2
I-1882	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Arg-PyrS2-3Thi-BztA-Gln-NH2
I-1883	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Arg-PyrS2-3Thi-BztA-Gln-NH2
I-1884	Ac-PL3-Asp-Cha-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1885	Ac-PL3-Asp-Cha-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1886	Ac-PL3-Asp-Npg-B5-Arg-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1887	Ac-PL3-Asp-Npg-B5-Arg-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1888	Ac-PL3-Asp-Npg-B5-Arg-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1889	Ac-PL3-Asp-Npg-B5-Arg-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1890	Ac-PL3-Asp-Npg-B5-Asp-Arg-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1891	Ac-PL3-Asp-Npg-B5-Asp-Arg-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1892	Ac-PL3-Asp-Npg-B5-Asn-Arg-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1893	Ac-PL3-Asp-Npg-B5-Asn-Arg-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1894	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-CypA-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1895	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Cba-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1896	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-CypA-BztA-Ser-NH2
I-1897	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-Cba-BztA-Ser-NH2
I-1898	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-Cba-BztA-Ser-NH2
I-1899	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1900	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1901	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ser-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1902	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ser-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-1903	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Ser-NH2
I-1904	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Asn-NH2
I-1905	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-Throl
I-1906	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-Prool
I-1907	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-Alaol
I-1908	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NHEt
I-1909	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1910	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-His-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1911	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Lys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1912	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1913	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-nLeu-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1914	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-PyrS2-3Thi-BztA-Phe-NH2
I-1915	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-iPrLys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-1916	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-His-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2

I-1917	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Lys-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-1918	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-1919	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-nLeu-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-1920	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-1921	Ac-PL3-Asp-Npg-B5-Asp-S3COOPipA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1922	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Hse-PyrS2-Phe-BztA-Hse-NH2
I-1923	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-3PyrA-Asn-PyrS2-Phe-BztA-Hse-NH2
I-1924	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-3ClF-Asn-PyrS2-Phe-BztA-Hse-NH2
I-1925	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-3cbmf-Asn-PyrS2-Phe-BztA-Hse-NH2
I-1926	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-3OMeF-Asn-PyrS2-Phe-BztA-Hse-NH2
I-1927	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-3PyrA-BztA-Hse-NH2
I-1928	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-3ClF-BztA-Hse-NH2
I-1929	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-3cbmf-BztA-Hse-NH2
I-1930	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-3OMeF-BztA-Hse-NH2
I-1931	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ser-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-1932	Ac-PL3-Hse-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-1933	Ac-PL3-Asn-Cha-B5-Asp-Hse-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-1934	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[H4IAP]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1935	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[TfePpz]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1936	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[Me2NPrPip]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1937	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[4MePpzPip]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1938	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[4PyPip]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1939	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[RDMAPyr]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1940	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[4Pippip]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1941	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[Ppz]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1942	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[NHBn]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1943	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-[Morph]GlnR-PyrS2-3Thi-BztA-Gln-NH2
I-1944	Ac-PL3-Asp-Npg-B5-AspSH-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1945	Ac-PL3-Asp-Npg-B5-AspSH-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1946	Ac-PL3-Asp-Npg-B5-Asp-AspSH-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1947	Ac-PL3-Asp-Npg-B5-Asp-AspSH-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1948	Ac-PL3-Asp-Npg-B5-Asp-GluSH-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1949	Ac-PL3-Asp-Npg-B5-Asp-GluSH-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1950	Ac-PL3-Asp-Npg-B5-[EtSSpy]AspE-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1951	Ac-PL3-Asp-Npg-B5-Asp-[EtSSpy]GluE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1952	Ac-PL3-[EtSSPh]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1953	Ac-PL3-[EtSSPh]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1954	Ac-PL3-Asp-Npg-B5-[EtSSPh]AspE-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1955	Ac-PL3-Asp-Npg-B5-[EtSSPh]AspE-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1956	Ac-PL3-Asp-Npg-B5-Asp-[EtSSPh]AspE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1957	Ac-PL3-Asp-Npg-B5-Asp-[EtSSPh]GluE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2

I-1958	Ac-PL3-Asp-Npg-B5-Asp-[EtSSPh]GluE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1959	Ac-PL3-[EtSSHex]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1960	Ac-PL3-[EtSSHex]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1961	Ac-PL3-Asp-Npg-B5-[EtSSHex]AspE-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1962	Ac-PL3-Asp-Npg-B5-Asp-[EtSSHex]AspE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1963	Ac-PL3-[EtSSEt]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1964	Ac-PL3-Asp-Npg-B5-[EtSSEt]AspE-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1965	Ac-PL3-Asp-Npg-B5-Asp-[EtSSEt]AspE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1966	Ac-PL3-Asp-Npg-B5-Asp-[EtSSEt]GluE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1967	Ac-PL3-Asp-Npg-B5-Asp-R3COOPipA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1968	Ac-PL3-Asp-Npg-B5-Asp-S2COOPipA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1969	Ac-PL3-Asp-Npg-B5-Asp-R2COOPipA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1970	Ac-PL3-Asp-Npg-B4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS1-3Thi-BztA-Gln-NH2
I-1971	Ac-PL3-Asp-Npg-B4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1972	Ac-PL3-Asp-Npg-B4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1973	Ac-PL3-Asp-Npg-B4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS3-3Thi-BztA-Gln-NH2
I-1974	Ac-PL3-Asp-Npg-B4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS1-3Thi-BztA-Gln-NH2
I-1975	Ac-PL3-Asp-Npg-B4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1976	Ac-PL3-Asp-Npg-B4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS3-3Thi-BztA-Gln-NH2
I-1977	Ac-PL3-Asp-Npg-S6-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1978	Ac-PL3-Asp-Npg-S6-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1979	Ac-PL3-Asp-Npg-S4-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1980	Ac-PL3-Asp-Npg-S3-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1981	Ac-PL3-Asp-Npg-S6-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1982	Ac-PL3-Asp-Npg-S4-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1983	Ac-PL3-Asp-Npg-S3-Asp-Asp-Ala-Ala-Phe-Leu-Aib-3Thi-BztA-Gln-NH2
I-1984	ProAm5-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1985	ProAm6-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-1986	ProAm6-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Thr-PyrS2-2ClF-BztA-Gln-NH2
I-1987	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-1988	Ac-Pro-Asp-Npg-R6-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1989	Ac-Pro-Asp-Npg-R4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1990	Ac-Pro-Asp-Npg-R3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1991	Ac-Pro-Asp-Npg-R6-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1992	Ac-Pro-Asp-Npg-R4-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1993	Ac-Pro-Asp-Npg-R3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-1994	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-hPhe-BztA-Gln-NH2
I-1995	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-hPhe-BztA-Gln-NH2
I-1996	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3F3MeF-BztA-Gln-NH2
I-1997	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3F3MeF-BztA-Gln-NH2
I-1998	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-1999	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Gln-NH2
I-2000	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3ClF-BztA-Gln-NH2

I-2001	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3ClF-BztA-Gln-NH2
I-2002	Ac-PL3-Asp-Ala-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2003	Ac-PL3-Asp-Ala-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2004	Ac-PL3-Asp-Npg-B5-Asn-Thr-iPrLys-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2005	Ac-PL3-Asp-Npg-B5-Asn-Thr-iPrLys-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2006	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-iPrLys-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2007	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-hPhe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2008	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-hPhe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2009	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-3F3MeF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2010	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-3F3MeF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2011	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-2ClF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2012	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-2ClF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2013	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-3ClF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2014	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-3ClF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2015	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Tyr-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2016	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Tyr-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2017	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrR2-3Thi-BztA-Gln-NH2
I-2018	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrR2-3Thi-BztA-Gln-NH2
I-2019	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrR2-3Thi-BztA-Gln-NH2
I-2020	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrR2-3Thi-BztA-Gln-NH2
I-2021	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrR2-3Thi-BztA-Gln-NH2
I-2022	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrR2-3Thi-BztA-Gln-NH2
I-2023	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-2ClF-BztA-Ala-NH2
I-2024	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-2ClF-BztA-Val-NH2
I-2025	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-2ClF-BztA-Phe-NH2
I-2026	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-2ClF-BztA-dAla-NH2
I-2027	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Ala-NH2
I-2028	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Val-NH2
I-2029	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Phe-NH2
I-2030	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-dAla-NH2
I-2031	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Ala-NH2
I-2032	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Val-NH2
I-2033	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-Phe-NH2
I-2034	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Asn-PyrS2-2ClF-BztA-dAla-NH2
I-2035	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-2ClF-BztA-Asn-NH2
I-2036	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-2ClF-BztA-Asn-NH2
I-2037	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2ClF-BztA-Asn-NH2
I-2038	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Asn-NH2
I-2039	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-2ClF-BztA-Asn-NH2
I-2040	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Asn-Ala-Ala-Ala-NH2
I-2041	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Asn-Ala-Ala-dAla-NH2
I-2042	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ala-PyrS2-3Thi-BztA-Asn-NH2

I-2043	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-NH2
I-2044	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Asn-NH2
I-2045	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Ser-PyrS2-3Thi-BztA-Asn-NH2
I-2046	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Ala-Ala-NH2
I-2047	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Ala-dAla-NH2
I-2048	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-3CH2NMe2F-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2049	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Asn-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2050	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ser-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2051	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Thr-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2052	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ala-NH2
I-2053	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Ala-PyrS2-3Thi-BztA-Ala-NH2
I-2054	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-BztA-Ala-NH2
I-2055	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-2056	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-3Thi-BztA-Leu-NH2
I-2057	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2058	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Asn-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2059	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ser-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2060	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Thr-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2061	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Met2O-NH2
I-2062	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Met2O-NH2
I-2063	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Met2O-NH2
I-2064	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Met2O-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2065	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Ala-NH2
I-2066	Ac-PL3-Asn-Cha-B5-Asp-Gln-His-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2067	Ac-PL3-Asn-Cha-B5-Asp-Gln-Gln-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2068	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Phe-NH2
I-2069	Ac-PL3-Asn-Cha-B5-Asp-Gln-His-Ala-Phe-Asn-PyrS2-Phe-BztA-Ala-NH2
I-2070	Ac-PL3-Asn-Cha-B5-Asp-Gln-Gln-Ala-Phe-Asn-PyrS2-Phe-BztA-Ala-NH2
I-2071	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-4Thz-BztA-Hse-NH2
I-2072	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-4Thz-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2073	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-NH2
I-2074	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-3Thi-BztA-Hse-NH2
I-2075	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-2Thi-BztA-Hse-NH2
I-2076	Ac-PL3-Asp-Npg-B5-Asp-[CH2CH2CO2H]TriAzDab-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2077	Ac-PL3-Asp-Npg-B5-Asp-[CH2CMe2CO2H]TriAzDab-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2078	Ac-PL3-Asp-Npg-B5-Asp-[CH2CO2H]TriAzDab-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2079	Ac-PL3-Asp-Npg-B5-Asp-[CMe2CO2H]TriAzDab-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2080	Ac-PL3-Asp-Npg-B5-Asp-[2COOHPh]TriAzDab-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2

I-2081	Ac-PL3-Asp-Npg-B5-Asp-[2COOHPh]TriAzDab-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2082	Ac-PL3-Asp-Npg-B5-Asp-[CH2CH2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2083	Ac-PL3-Asp-Npg-B5-Asp-[CH2CMe2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2084	Ac-PL3-Asp-Npg-B5-Asp-[CH2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2085	Ac-PL3-Asp-Npg-B5-Asp-[CMe2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2086	Ac-PL3-Asp-Npg-B5-Asp-[2COOHPh]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2087	Ac-PL3-Asp-Npg-B5-Asp-[2COOH4NH2Ph]Dap-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2088	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-dGln-NH2
I-2089	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-dGln-NH2
I-2090	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-dAla-NH2
I-2091	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-dAla-NH2
I-2092	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-dGln-NH2
I-2093	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-dGln-NH2
I-2094	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-dAla-NH2
I-2095	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-dAla-NH2
I-2096	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-dAla-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2097	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-dAla-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2098	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-dAla-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2099	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-dAla-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2100	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-dAla-Phe-Leu-PyrS2-3Thi-BztA-dAla-NH2
I-2101	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-dAla-Phe-Leu-PyrS2-2F3MeF-BztA-dAla-NH2
I-2102	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-iPrLys-PyrS2-Phe-BztA-Hse-NH2
I-2103	Ac-PL3-Ser-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2104	Ac-PL3-Thr-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2105	Ac-PL3-Gln-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2106	Ac-PL3-His-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2107	Ac-PL3-4Thz-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2108	Ac-PL3-4Tria-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2109	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-His-NH2
I-2110	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Lys-NH2
I-2111	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Asn-NH2
I-2112	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Thr-NH2
I-2113	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Gln-NH2
I-2114	Ac-PL3-Asp-Npg-B5-Asp-hTyr-Ala-Ala-3COOHF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2115	Ac-PL3-Asp-Npg-B5-Asp-hTyr-Ala-Ala-3COOHF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2116	Ac-PL3-Asp-Npg-B5-Asp-hTyr-Ala-Ala-3COOHF-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-2117	Ac-PL3-Asp-Npg-B5-Asp-hTyr-Ala-Ala-3COOHF-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-2118	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-3COOHF-Asn-PyrS2-3Thi-BztA-Gln-NH2

I-2119	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-3COOHF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2120	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-3COOHF-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-2121	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-3COOHF-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-2122	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-3COOHF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2123	Ac-PL3-Asp-Npg-B5-Asp-His-Ala-Ala-3COOHF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2124	Ac-PL3-Asp-Npg-B5-Asp-Tyr-Ala-Ala-3COOHF-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-2125	Ac-PL3-Asp-Npg-B5-Asp-Tyr-Ala-Ala-3COOHF-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-2126	Ac-PL3-Asp-Npg-B5-Asp-Tyr-Ala-Ala-3COOHF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2127	Ac-PL3-Asp-Npg-B5-Asp-Trp-Ala-Ala-3COOHF-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2128	Ac-PL3-Asp-Npg-B5-Asp-Trp-Ala-Ala-3COOHF-Hse-PyrS2-3Thi-BztA-Gln-NH2
I-2129	Ac-PL3-Asp-Npg-B5-Asp-Trp-Ala-Ala-3COOHF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2130	Ac-PL3-TfeGA-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2131	Ac-PL3-TfeGA-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2132	Ac-PL3-Aad-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2133	Ac-PL3-Aad-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2134	Ac-PL3-3COOHF-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2135	Ac-PL3-3COOHF-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2136	Ac-PL3-2COOHF-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2137	Ac-PL3-2COOHF-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2138	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Trp-NH2
I-2139	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Trp-NH2
I-2140	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-2141	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2
I-2142	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ala-NH2
I-2143	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ala-NH2
I-2144	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Phe-NH2
I-2145	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Phe-NH2
I-2146	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-His-PyrS2-3Thi-BztA-Gln-NH2
I-2147	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-His-PyrS2-3Thi-BztA-Gln-NH2
I-2148	Ac-PL3-Asp-Npg-B5-Thr-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2149	Ac-PL3-Asp-Npg-B5-Thr-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2150	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-3CO2PhF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2151	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-3CO2PhF-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2152	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3BrF-3Thi-Gln-NH2
I-2153	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3BrF-Phe-Gln-NH2
I-2154	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3BrF-Cba-Gln-NH2
I-2155	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3BrF-2F3MeF-Gln-NH2
I-2156	Ac-PL3-Asp-Npg-B3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2157	Ac-PL3-Asp-Npg-B3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS3-3Thi-BztA-Gln-NH2
I-2158	Ac-PL3-Asp-Npg-B3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS4-3Thi-BztA-Gln-NH2
I-2159	Ac-PL3-Asp-Npg-B3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS4-3Thi-BztA-Gln-NH2
I-2160	Ac-PL3-Asp-Npg-B3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2161	Ac-PL3-Asp-Npg-B3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS3-3Thi-BztA-Gln-NH2

I-2162	Ac-PL3-Asp-Npg-B3-Asp-Asp-Ala-Ala-Phe-Leu-PyrS4-3Thi-BztA-Gln-NH2
I-2163	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-3cbmf-BztA-Gln-NH2
I-2164	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-3cbmf-BztA-Gln-NH2
I-2165	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Hse-NH2
I-2166	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-3cbmf-BztA-Hse-NH2
I-2167	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2168	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-2cbmf-BztA-Hse-NH2
I-2169	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-4cbmf-BztA-Hse-NH2
I-2170	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Asn-BztA-Hse-NH2
I-2171	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Gln-BztA-Hse-NH2
I-2172	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Asn-PyrS2-Tyr-BztA-Hse-NH2
I-2173	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-2cbmf-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2174	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-4cbmf-Asn-PyrS2-Phe-BztA-Hse-NH2
I-2175	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-Trp-Gln-NH2
I-2176	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-4ClW-Gln-NH2
I-2177	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-4ClW-Gln-NH2
I-2178	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-4FW-Gln-NH2
I-2179	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-4FW-Gln-NH2
I-2180	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-7AzaW-Gln-NH2
I-2181	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-7AzaW-Gln-NH2
I-2182	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-34ClF-Gln-NH2
I-2183	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-34ClF-Gln-NH2
I-2184	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-3SO2F-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2185	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-3SO2F-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2186	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-BnBoroleK-NH2
I-2187	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-BnBoroleK-NH2
I-2188	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Me2Asn-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2189	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-nLeu-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-2190	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ser-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-2191	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Me2Asn-Ala-Phe-Leu-PyrS2-3Thi-BztA-Val-NH2
I-2192	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-3Thi-BztA-Npg-NH2
I-2193	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-nLeu-Ala-Phe-Leu-PyrS2-3Thi-BztA-Npg-NH2
I-2194	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-PyrS2-3Thi-BztA-Npg-NH2
I-2195	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ser-Ala-Phe-Leu-PyrS2-3Thi-BztA-Npg-NH2
I-2196	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Me2Asn-Ala-Phe-Leu-PyrS2-3Thi-BztA-Npg-NH2
I-2197	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS1-3Thi-BztA-Gln-NH2
I-2198	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS1-3Thi-BztA-Gln-NH2
I-2199	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS3-3Thi-BztA-Gln-NH2
I-2200	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-S7-3Thi-BztA-Gln-NH2
I-2201	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-Az-3Thi-BztA-Gln-NH2
I-2202	Ac-PL3-Asp-Npg-B5-Asp-4F3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-2203	Ac-PL3-Asp-Npg-B5-Asp-4F3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2
I-2204	Ac-PL3-Asp-Npg-B5-Asp-4F3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Gln-NH2

I-2205	Ac-PL3-Asp-Npg-B5-Asp-4F3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-2206	Ac-PL3-Asp-Npg-B5-Asp-4F3COOHF-Gln-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2207	Ac-PL3-Asp-Npg-B5-Asp-4F3COOHF-Aib-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2208	Ac-PL3-Asp-Npg-B5-Asp-5F3Me3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2209	Ac-PL3-Asp-Npg-B5-Asp-5F3Me3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ser-NH2
I-2210	Ac-PL3-Asp-Npg-B5-Asp-5F3Me3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ser-NH2
I-2211	Ac-PL3-Asp-Npg-B5-Asp-5F3Me3COOHF-Gln-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2212	Ac-PL3-Asp-Npg-B5-Asp-5F3Me3COOHF-Aib-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2213	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-SdN-3Thi-BztA-Gln-NH2
I-2214	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-[Ph]-3SF-Phe-Gln-NH2
I-2215	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-[CyPr]-3SF-Phe-Gln-NH2
I-2216	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-34ClF-Gln-NH2
I-2217	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-34ClF-Ala-NH2
I-2218	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-34ClF-Ser-NH2
I-2219	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-34ClF-Ala-NH2
I-2220	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-4ClF-Gln-NH2
I-2221	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-4ClF-Ala-NH2
I-2222	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-4ClF-Ser-NH2
I-2223	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-4ClF-Ala-NH2
I-2224	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-3ClF-Gln-NH2
I-2225	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-3ClF-Ala-NH2
I-2226	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-3ClF-Ser-NH2
I-2227	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-3ClF-Ala-NH2
I-2228	Ac-MePro-Asp-Npg-Aib-Asp-Asp-Ala-Ala-Phe-Gln-Aib-3thi-BztA-His-NH2
I-2229	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3thi-BztA-His-Lys-NH2
I-2230	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3thi-BztA-His-Lys-NH2
I-2231	Ac-MePro-Asp-Npg-Aib-Asp-Asp-Ala-Ala-Phe-Gln-Aib-3thi-BztA-His-Lys-NH2
I-2232	Ac-MePro-His-Gln-Aib-BztA-3thi-Ala-Phe-Asp-Npg-Aib-Asp-Ala-Asp-Lys-NH2
I-2233	Ac-PL3-Asp-Npg-B5-Asp-[NdiMeButC]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2234	Ac-PL3-Asp-Npg-B5-Asp-[Me2NPr]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2235	Ac-PL3-Asp-Npg-B5-Asp-[4AcMePip]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2236	Ac-PL3-Asp-Npg-B5-Asp-[4CF3PhAc]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2237	Ac-PL3-Asp-Npg-B5-Asp-[Pic]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2238	Ac-PL3-Asp-Npg-B5-Asp-[MeMorphBz]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2239	Ac-PL3-Asp-Npg-B5-Asp-[MorphAc]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2240	Ac-PL3-Asp-Npg-B5-Asp-[MePipAc]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2241	Ac-PL3-Asp-Npg-B5-Asp-[PfPhAc]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2242	Ac-PL3-Asp-Npg-B5-Asp-[PfBz]GA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2243	Ac-PL3-Asp-Npg-B5-Asp-[NdiMeButC]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2244	Ac-PL3-Asp-Npg-B5-Asp-[Me2NPr]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2245	Ac-PL3-Asp-Npg-B5-Asp-[4AcMePip]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2246	Ac-PL3-Asp-Npg-B5-Asp-[4CF3PhAc]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2247	Ac-PL3-Asp-Npg-B5-Asp-[Pic]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2

I-2248	Ac-PL3-Asp-Npg-B5-Asp-[MeMorphBz]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2249	Ac-PL3-Asp-Npg-B5-Asp-[MorphAc]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2250	Ac-PL3-Asp-Npg-B5-Asp-[MePipAc]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2251	Ac-PL3-Asp-Npg-B5-Asp-[PfPhAc]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2252	Ac-PL3-Asp-Npg-B5-Asp-[PfBz]GAbu-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2253	ClAc-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2254	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-[Ph]3SF-3Thi-Gln-NH2
I-2255	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-[Ph]3SF-Cba-Gln-NH2
I-2256	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-[Ph]3SF-2F3MeF-Gln-NH2
I-2257	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2258	Ac-PL3-RbOHAsp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2259	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-3Thi-BztA-Ala-NH2
I-2260	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-3FF-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2261	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3FF-BztA-Ala-NH2
I-2262	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-4FF-Leu-PyrS2-3Thi-BztA-Ala-NH2
I-2263	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-4FF-BztA-Ala-NH2
I-2264	Ac-HypEs5-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2265	Ac-HypEs5-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2266	ProSAm3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2267	ProSAm3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2268	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Ala-Ala-Ala-Ala-NH2
I-2269	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Ala-Ala-Ala-Ala-Ala-Ala-NH2
I-2270	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Ala-Ala-Ala-Ala-Ala-Ala-Ala-Ala-NH2
I-2271	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Aib-Ala-NH2
I-2272	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Aib-Ala-Aib-Ala-NH2
I-2273	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Aib-Ala-Aib-Ala-Aib-Ala-NH2
I-2274	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Leu-NH2
I-2275	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Leu-Leu-Leu-NH2
I-2276	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Leu-Leu-Leu-NH2
I-2277	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Leu-Leu-NH2
I-2278	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Leu-Leu-NH2
I-2279	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Leu-Leu-Leu-Leu-Leu-NH2
I-2280	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Leu-Leu-Leu-Leu-Leu-NH2

I-2281	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Leu-Ala-Leu-Ala-NH2
I-2282	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Leu-Ala-Leu-Ala-NH2
I-2283	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Leu-Ala-Leu-Ala-Leu-Ala-NH2
I-2284	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Asn-Ala-Leu-Ala-Leu-Ala-Leu-Ala-NH2
I-2285	BrAc-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-2286	BrAc-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2287	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-3Br4FF-Gln-NH2
I-2288	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-3Br4FF-Ala-NH2
I-2289	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-3Br4FF-Ser-NH2
I-2290	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-3Br4FF-Ala-NH2
I-2291	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-34MeF-Gln-NH2
I-2292	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-34MeF-Ala-NH2
I-2293	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-34MeF-Ser-NH2
I-2294	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-34MeF-Ala-NH2
I-2295	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-5IndA-Gln-NH2
I-2296	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-5IndA-Ala-NH2
I-2297	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-5IndA-Ser-NH2
I-2298	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-5IndA-Ala-NH2
I-2299	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[NHEt]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-[NHEt]GlnR-NH2
I-2300	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[NMe2]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-[NMe2]GlnR-NH2
I-2301	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[Me2diaminobutane]GlnR-Ala-Phe-Val-PyrS2-3Thi-BztA-Ala-NH2
I-2302	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[NHEt]GlnR-Ala-Phe-Val-PyrS2-3Thi-BztA-Ala-NH2
I-2303	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[NMe2]GlnR-Ala-Phe-Val-PyrS2-3Thi-BztA-Ala-NH2
I-2304	CO2Bu-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2305	CO2iBu-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2306	BzAm3Oallyl-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2307	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-3BrF-Gln-NH2
I-2308	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-3BrF-Ala-NH2
I-2309	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-2NapA-Gln-NH2
I-2310	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-2NapA-Ala-NH2
I-2311	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-RbMe2NapA-Gln-NH2
I-2312	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-RbMe2NapA-Ala-NH2
I-2313	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-3Thi-SbMe2NapA-Gln-NH2
I-2314	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Val-PyrS2-3Thi-SbMe2NapA-Ala-NH2
I-2315	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[Morph]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2316	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[TfePpz]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2

I-2317	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[4Pippip]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2318	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[2OxoPpz]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2319	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[AcPpz]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2320	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[isoindoline]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2321	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[EtSO2Ppz]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2322	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[bismethoxyethylamine]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2323	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-[Me2NPrPip]GlnR-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2324	CO2Me-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2325	CO2Hex-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2326	CO2Ph-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-2327	CO2Ph-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2328	Ac-HypBzEs3OAllyl-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2329	Ac-PL3-[CH2CMe2CO2H]TriAzDap-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2330	Ac-PL3-[CMe2CO2H]TriAzDap-Npg-B5-Asp-Asp-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2331	Ac-PL3-Glu-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2332	Ac-PL3-Glu-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2333	Ac-PL3-Asn-Npg-B5-Asn-Thr-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2334	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Ala-NH2
I-2335	Ac-PL3-Asp-Npg-B5-Asn-3COOHF-Ala-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2336	Ac-PL3-Asp-Npg-B5-Asn-3COOHF-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-2337	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Ala-Phe-Thr-PyrS2-3Thi-BztA-His-NH2
I-2338	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2339	Ac-PL3-Asp-Npg-B5-Asn-Thr-Ala-Aib-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
I-2340	Ac-PL3-Asn-Cha-B5-Asp-3COOHF-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2341	Ac-PL3-Asn-Cha-B5-Asp-TfeGA-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2342	Ac-PL3-Asn-Cha-B5-Asp-3cbmf-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2343	Ac-PL3-Asn-Cha-B5-Asp-3cbmf-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2344	Ac-PL3-Asn-Cha-B5-Asp-Hse-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2345	Ac-PL3-Asn-Cha-B5-Asp-Hse-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2346	Ac-PL3-Asn-Cha-B5-Asp-Lys-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2347	Ac-PL3-Asn-Cha-B5-Asp-Lys-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2348	Ac-PL3-Asn-Cha-B5-Asp-His-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2349	Ac-PL3-Asn-Cha-B5-Asp-His-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2350	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-2351	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-His-NH2
I-2352	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Ala-NH2

I-2353	Ac-PL3-Hse-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2354	Ac-PL3-Asn-Cha-B5-Asp-Gln-Hse-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2355	Ac-PL3-Asn-Cha-B5-Asp-Gln-Hse-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2356	Ac-PL3-[Et]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2357	Ac-PL3-Asp-Npg-B5-[Et]AspE-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2358	Ac-PL3-Asp-Npg-B5-Asp-[Et]AspE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2359	Ac-PL3-[Me]AspE-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2360	Ac-PL3-Asp-Npg-B5-[Me]AspE-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2361	Ac-PL3-Asp-Npg-B5-Asp-[Me]AspE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2362	CO2Me-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-2363	CO2Bu-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-2364	CO2iBu-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-2365	Ac-PL3-Asp-Npg-B5-Asp-[Et]GluE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2366	Ac-PL3-Asp-Npg-B5-Asp-[Me]GluE-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2367	Ac-PL3-Asp-Npg-B5-Asp-[CH2CH2CO2H]TriAzDap-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2368	Ac-PL3-Asp-Npg-B5-Asp-[CH2CMe2CO2H]TriAzDap-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2369	Ac-PL3-Asp-Npg-B5-Asp-[CMe2CO2H]TriAzDap-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2370	Ac-PL3-Asp-Npg-B5-Asp-[CH2CH2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-2371	Ac-PL3-Asp-Npg-B5-Asp-[CH2CH2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-2372	Ac-PL3-Asp-Npg-B5-Asp-[CH2CMe2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-2373	Ac-PL3-Asp-Npg-B5-Asp-[CH2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-2374	Ac-PL3-Asp-Npg-B5-Asp-[CMe2CO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-2375	Ac-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-[3C]TriAzLys-NH2
I-2376	BzAm3OAllyl-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2377	ProBzAm3OAllyl-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2378	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Ala-NH2
I-2379	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Val-NH2
I-2380	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Leu-NH2
I-2381	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Phe-NH2
I-2382	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Gln-NH2
I-2383	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Thr-NH2
I-2384	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Ser-NH2

I-2385	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Ile-NH2
I-2386	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Aib-NH2
I-2387	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-CyLeu-NH2
I-2388	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Cbg-NH2
I-2389	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Cpg-NH2
I-2390	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Asn-NH2
I-2391	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-nLeu-NH2
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I-2393	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-Arg-NH2
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I-2397	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-dThr-NH2
I-2398	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Leu-dGln-NH2
I-2399	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Ala-Ala-NH2
I-2400	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Phe-Ala-NH2
I-2401	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-Val-Ala-NH2
I-2402	PropynOH-PL3-Asp-Npg-B5-Asp-Asp-Ala-Ala-Phe-Gln-PyrS2-3Thi-BztA-His-NH2
I-2403	PropynOH-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2ClF-BztA-Ala-NH2
I-2404	PAc3OAllyl-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2405	ProPAc3OAllyl-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2406	Ac-HypPAc3OAllyl-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2407	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Arg-PyrS2-3Thi-BztA-Gln-NH2
I-2408	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2409	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Thr-PyrS2-3Thi-BztA-Gln-NH2
I-2410	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-His-PyrS2-3Thi-BztA-Gln-NH2
I-2411	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-BztA-Ala-NH2
I-2412	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-BztA-Phe-NH2
I-2413	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-BztA-Arg-NH2
I-2414	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-BztA-His-NH2

I-2415	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-BztA-Asn-NH2
I-2416	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-BztA-Thr-NH2
I-2417	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Asn-PyrS2-3Thi-34ClF-Gln-NH2
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I-2421	Ac-PL3-Asn-Cha-B5-Asp-Gln-Gln-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-2422	Ac-PL3-Asn-Cha-B5-Asp-Gln-Ser-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-2423	Ac-PL3-Asn-Cha-B5-Asp-Gln-Thr-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
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I-2427	Ac-PL3-Asn-Cha-B5-Asp-Gln-MorphNva-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-2428	Ac-PL3-Asn-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphNva-NH2
I-2429	Ac-PL3-Asp-Cha-B5-Asp-Gln-iPrLys-Ala-Phe-Leu-PyrS2-Phe-BztA-Lys-NH2
I-2430	Ac-PL3-Asp-Npg-B5-Asp-5iPr3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2431	Ac-PL3-Asp-Npg-B5-Asp-5iPr3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2432	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-[3C]TriAzLys-NH2
I-2433	Ac-PL3-Hse-Npg-B5-Hse-Glu-Ala-Ala-4BrF-Leu-PyrS2-Phe-BztA-Asn-NH2
I-2434	Ac-PL3-Asn-Npg-B5-Asn-Glu-Gln-Ala-Phe-Leu-PyrS2-Phe-BztA-Gln-NH2
I-2435	Ac-PL3-Asn-Npg-B5-Asn-Glu-Gln-Ala-Phe-Leu-S8-Phe-BztA-Gln-NH2
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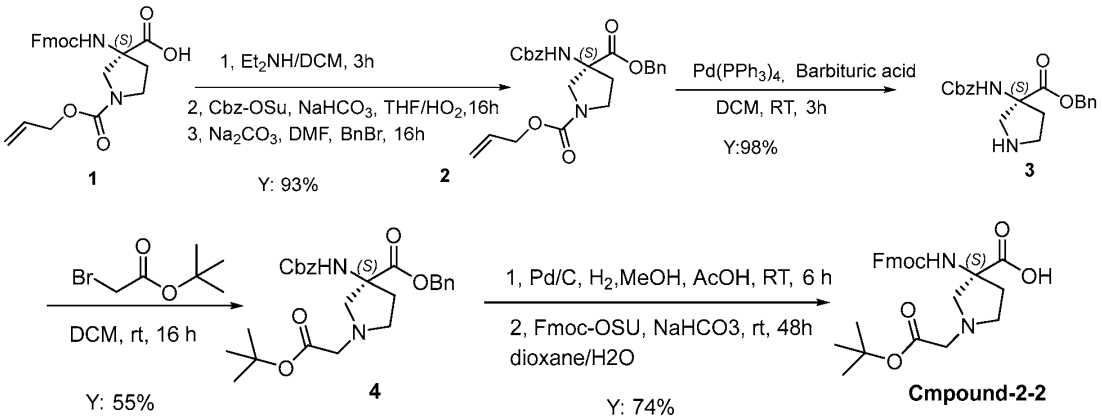
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I-2489	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-7FBztA-Ala-NH2
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I-2493	Ac-PL3-Asp-Npg-B5-Asn-Thr-CyLeu-Ala-Phe-Asn-PyrS2-3Thi-BztA-Gln-NH2
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I-2496	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-Me2Asn-PyrS2-3Thi-BztA-Asn-NH2
I-2497	Ac-PL3-Asp-Npg-B5-Asn-Thr-Aib-Ala-Phe-MeAsn-PyrS2-3Thi-BztA-Asn-NH2
I-2498	Ac-PL3-Asn-Cha-B5-Asp-Gln-Hse-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2499	Ac-PL3-Asn-Cha-B5-Asp-Gln-nLeu-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2500	Ac-PL3-Asn-Cha-B5-Asp-Gln-hhLeu-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2501	Ac-PL3-Asn-Cha-B5-Asp-Gln-Me2Gln-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2502	Ac-PL3-Asn-Cha-B5-Asp-Gln-MeGln-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2503	Ac-PL3-Asn-Cha-B5-Asp-Gln-Thr-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2504	Ac-PL3-Asn-Cha-B5-Asp-Gln-Gln-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2505	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS-2F3MeF-BztA-Gln-NH2
I-2506	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS-2F3MeF-BztA-Ala-NH2
I-2507	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS-2F3MeF-BztA-Ala-NH2
I-2508	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS1-2F3MeF-BztA-Gln-NH2
I-2509	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS1-2F3MeF-BztA-Gln-NH2
I-2510	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS1-2F3MeF-BztA-Ala-NH2
I-2511	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2512	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2513	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2514	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2515	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2516	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2517	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2518	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS-2F3MeF-BztA-Gln-NH2
I-2519	Ac-PL3-Asp-Npg-B6-Asp-3COOHF-Gln-Ala-Phe-Leu-PyrS1-2F3MeF-BztA-Ala-NH2
I-2520	Ac-PL3-Asp-Npg-B5-Asp-[CH2CChCO2H]TriAzDap-Gln-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ala-NH2
I-2521	Ac-PL3-Asp-Npg-B5-Asp-[CH2CChCO2H]TriAzDap-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Ser-NH2
I-2522	Ac-PL3-Asn-Cha-B5-Asp-Gln-[Ac]Lys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2523	Ac-PL3-Asn-Cha-B5-Asp-Gln-[Phc]Lys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2524	Ac-PL3-Asn-Cha-B5-Asp-Gln-[MeSO2]Lys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2525	Ac-PL3-Asn-Cha-B5-Asp-Gln-[CF3CO]Lys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2526	Ac-PL3-Asn-Cha-B5-Asp-Gln-[mPEG4]Lys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2527	Ac-PL3-Asn-Cha-B5-Asp-Gln-[MorphAc]Lys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2

I-2528	Ac-PL3-Asn-Cha-B5-Asp-Gln-[Me2Npr]Lys-Ala-Phe-Leu-PyrS2-Phe-BztA-MorphAsn-NH2
I-2529	5hexenyl-PL3-Asp-AllylGly-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2530	4pentenyl-PL3-Asp-AllylGly-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2531	Ac-PL3-Asp-nLeu-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2532	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2533	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-nLeu-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2534	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2535	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Me2Gln-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2536	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Me2Gln-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2537	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-MorphGln-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2538	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-MorphGln-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2539	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-AcLys-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2540	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-AcLys-PyrS2-2F3MeF-BztA-Me2Gln-NH2
I-2541	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2542	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-nLeu-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2543	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Phe-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2544	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Me2Gln-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2545	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Me2Gln-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2546	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-MorphGln-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2547	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-MorphGln-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2548	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-AcLys-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2549	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-AcLys-PyrS2-2F3MeF-BztA-MorphGln-NH2
I-2550	Bn3OAllyl-AcAsp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2551	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-nLeu-PyrS2-3Thi-BztA-[NMe2]GlnR-NH2
I-2552	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-nLeu-PyrS2-3Thi-BztA-[NHEt]GlnR-NH2
I-2553	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-nLeu-PyrS2-3Thi-BztA-[Morph]GlnR-NH2
I-2554	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-nLeu-PyrS2-3Thi-BztA-[bismethoxyethylamine]GlnR-NH2

I-2555	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-nLeu-PyrS2-3Thi-BztA-[4Pippip]GlnR-NH2
I-2556	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-nLeu-PyrS2-3Thi-BztA-[AcPpz]GlnR-NH2
I-2557	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-nLeu-PyrS2-3Thi-BztA-[4F3CPip]GlnR-NH2
I-2558	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Abu-PyrS2-3Thi-BztA-[Morph]GlnR-NH2
I-2559	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Abu-PyrS2-3Thi-BztA-[bismethoxyethylamine]GlnR-NH2
I-2560	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Abu-PyrS2-3Thi-BztA-[4Pippip]GlnR-NH2
I-2561	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Abu-PyrS2-3Thi-BztA-[AcPpz]GlnR-NH2
I-2562	Ac-PL3-Tyr-TfeGA-B5-Ala-Asp-Asp-Ala-Ala-4BrF-S8-Ala-Phe-BztA-Gln-NH2
I-2563	Ac-R3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2564	Ac-R5-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2565	Ac-R5-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2566	Ac-Pro-R3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2567	Ac-Pro-R5-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2568	Ac-PyrR-Ala-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2569	Ac-PyrR-Glu-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2570	Ac-R3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2571	Ac-R5-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2572	Ac-Pro-R3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2573	Ac-Pro-R5-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2574	Ac-R5-Ala-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2575	Ac-Pro-R5-Glu-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2576	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-dSer-PyrS2-3Thi-BztA-dSer-Ala-NH2
I-2577	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Ser-PyrS2-3Thi-BztA-Ser-Ala-NH2
I-2578	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-AcLys-PyrS2-3Thi-BztA-Ala-Ala-NH2
I-2579	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-AcLys-PyrS2-2F3MeF-BztA-Ala-Ala-NH2
I-2580	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-SPip1-2F3MeF-BztA-Gln-NH2
I-2581	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-SPip2-2F3MeF-BztA-Gln-NH2
I-2582	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-SPip2-2F3MeF-BztA-Gln-NH2
I-2583	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-SPip3-2F3MeF-BztA-Gln-NH2
I-2584	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-SPip1-2F3MeF-BztA-Ala-NH2
I-2585	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-SPip2-2F3MeF-BztA-Ala-NH2
I-2586	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-SPip2-2F3MeF-BztA-Ala-NH2
I-2587	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-SPip3-2F3MeF-BztA-Ala-NH2
I-2588	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-SPip2-3Thi-BztA-Gln-NH2
I-2589	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-SPip2-3Thi-BztA-Gln-NH2
I-2590	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-SPip3-3Thi-BztA-Gln-NH2
I-2591	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-SPip1-3Thi-BztA-Ala-NH2

I-2592	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-SPip2-3Thi-BztA-Ala-NH2
I-2593	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Gln-Ala-Phe-Leu-SPip2-3Thi-BztA-Ala-NH2
I-2594	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2595	Ac-PL3-Asp-Npg-B5-Asp-TfeGA-Ala-Ala-Phe-Leu-PyrS2-3Thi-BztA-Gln-NH2
I-2596	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2597	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-PyrS2-2F3MeF-BztA-Gln-NH2
I-2598	5hexenyl-MePro-Asp-B5-Ala-Asp-Asp-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2599	4pentenyl-MePro-Asp-B5-Ala-Asp-Asp-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2600	5hexenyl-MePro-Asp-B5-Ala-Asp-Asp-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2601	4pentenyl-MePro-Asp-B5-Ala-Asp-Asp-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2602	5hexenyl-MePro-Asp-B5-Ala-Asp-3COOHF-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2603	4pentenyl-MePro-Asp-B5-Ala-Asp-3COOHF-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2604	5hexenyl-MePro-Asp-B5-Ala-Asp-3COOHF-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2605	4pentenyl-MePro-Asp-B5-Ala-Asp-3COOHF-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2606	BzAm2Allyl-MePro-Asp-B5-Ala-Asp-Asp-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2607	BzAm2Allyl-MePro-Asp-B5-Ala-Asp-3COOHF-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2608	3butenyl-MePro-Asp-B5-Ala-Asp-Asp-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2609	5hexenyl-MePro-Asp-B5-Ala-Asp-Asp-Ala-Ala-Phe-PyrS2-Leu-3Thi-BztA-Gln-NH2
I-2610	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-Az2-2F3MeF-BztA-Gln-NH2
I-2611	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-Az3-2F3MeF-BztA-Gln-NH2
I-2612	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Ala-Ala-Phe-Leu-Az3-3Thi-BztA-Gln-NH2
I-2613	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-Az2-2F3MeF-BztA-Gln-NH2
I-2614	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-Az2-2F3MeF-BztA-Gln-NH2
I-2615	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-Az3-2F3MeF-BztA-Gln-NH2
I-2616	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-Az3-2F3MeF-BztA-Gln-NH2
I-2617	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-Az2-3Thi-BztA-Gln-NH2
I-2618	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-Az3-3Thi-BztA-Gln-NH2
I-2619	Ac-PL3-Asp-Npg-B5-Asp-3COOHF-Aib-Ala-Phe-Leu-Az3-3Thi-BztA-Gln-NH2

[0783] Example 6. Synthesis of compound 2-2.



[0784] Step 1: 1-Allyl 3-benzyl (S)-3-(((benzyloxy)carbonyl)amino)pyrrolidine-1,3-dicarboxylate (2). A mixture of (S)-3-((((9H-fluoren-9-yl)methoxy)carbonyl)amino)-1-((allyloxy) carbonyl)pyrrolidine-3-carboxylic acid (20 g, 45.9 mmol) in DCM (300 mL) and Et_2N (300 mL) was stirred at room temperature for 3 h. The mixture was concentrated and dissolved into THF (400 mL) and water (400 mL). Cbz-OSU (17.1 g, 68.9 mmol) and $NaHCO_3$ (7.71 g, 91.7 mmol) was add. The reaction mixture was stirred at room temperature for 16 h. The mixture was adjusted pH to 3~4 with 1N HCl. The aqueous phase was extracted with EtOAc (3 × 800 mL). The desired EtOAc layer was then dried, concentrated to afford the crude product and dissolved into DMF (500 mL). BnBr (15.69 g, 91.7 mmol) and Na_2CO_3 (9.72 g, 91.7 mmol) was added and stirred at room temperature for 16 h. The reaction mixture was diluted with ethyl acetate (2 L), washed with brine (5 × 500 mL), dried over Na_2SO_4, concentrated and purified by silica gel column chromatography (eluted with hexane/ ethyl acetate = 2:1, V/V) to afford the product (18.7 g, 93% yield) as a brown oil. MS (ESI): *m/z* =439.1 $[M+H]^+$.

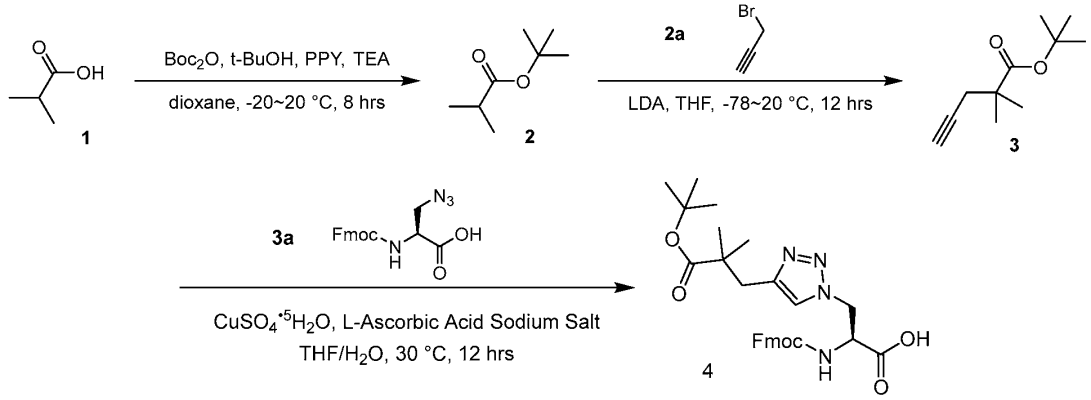
[0785] Step 2: Benzyl (S)-3-(((benzyloxy)carbonyl)amino)pyrrolidine-3-carboxylate (3). A mixture of 1-allyl 3-benzyl (S)-3-(((benzyloxy)carbonyl)amino)pyrrolidine -1,3-dicarboxylate (9.35 g, 21.3 mmol), $Pd(PPh_3)_4$ (4.93 g, 4.3 mmol) and Barbituric acid (5.46 g, 42.7 mmol) in DCM (300 mL) under Ar was stirred at room temperature for 3 h. The mixture was concentrated and purified by silica gel column chromatography (eluted with DCM/ MeOH = 10:1, V/V) to afford the product (7.5 g, 98% yield) as a brown oil. MS (ESI): *m/z* =355.1 $[M+H]^+$.

[0786] Step 3: Benzyl (S)-3-(((benzyloxy)carbonyl)amino)-1-(2-(tert-butoxy)-2-oxoethyl) pyrrolidine-3-carboxylate (4). A mixture of benzyl (S)-3-(((benzyloxy)carbonyl)amino)pyrrolidine-3-carboxylate (15 g, 42.4 mmol) and tert-butyl 2-bromoacetate (16.5 g, 84.7 mmol) in DCM (400 mL) was stirred at room temperature for 16 h. Et_2NH (12.4 g, 169.5 mmol) was added and stirred at room temperature for 3 h. The mixture was adjusted PH to 8~9 with sat. $NaHCO_3$. The aqueous phase was extracted with DCM (3 × 500 mL). The desired DCM layers was then dried, concentrated purified by silica gel column chromatography (eluted with hexane/ ethyl acetate = 2:1, V/V) to afford the product (10.9 g, 55% yield) as a yellow oil. MS (ESI): *m/z* =469.2 $[M+H]^+$.

[0787] Step 4: (S)-3-((((9H-fluoren-9-yl)methoxy)carbonyl)amino)-1-(2-(tert-butoxy)-2-oxoethyl)pyrrolidine-3-carboxylic acid (compound-2-2). A mixture of benzyl (S)-3-(((benzyloxy)carbonyl)amino)-1-(2-(tert-butoxy)-2- oxoethyl)pyrrolidine-3-carboxylate (14.5 g, 31 mmol) and Palladium on carbon (6 g, 10%) in MeOH (600 mL) and AcOH (20 mL) was attached to a hydrogenation apparatus. The system was evacuated and then refilled with hydrogen. The mixture was stirred at room temperature for 6 h. The reaction mixture was filtered out and the filtrate was concentrated and dissolved into dioxane (300 mL) and water (300 mL). FmocOSu (20.88 g, 62 mmol) and $NaHCO_3$ (13 g, 155 mmol) was added. The mixture was stirred at room temperature for 48 h. The

mixture was adjusted PH to 3~4 with 0.5 N HCl. The aqueous phase was extracted with DCM (3 × 500 mL). The desired DCM layers was then dried and concentrated. The resulting solid was recrystallized from methanol : EtOAc : PE= 1:1:1 to give the product (10.62 g, 74% yield) as a white solid. MS (ESI): m/z =467.0 [M+H]+. 400 MHz, DMSO-d6, δ 7.90-7.89 (m, 3H); 7.73 (d, *J* = 7.6 Hz, 2H); 7.42 (t, *J* = 7.2 Hz, 2H); 7.34 (t, *J* = 7.4 Hz, 2H); 4.30-4.20 (m, 3H); 3.27-3.18 (m, 2H); 3.13 (d, *J* = 10 Hz, 1H); 2.93 (d, *J* = 10 Hz, 1H); 2.84-2.79 (m, 1H); 2.66-2.60 (m, 1H); 2.24-2.17 (m, 1H); 2.06-2.00 (m, 1H); 1.41 (s, 9H). Purity by HPLC: 99.78 % (214 nm), RT= 16.29 min; Mobile Phase: A: Water (0.05% TFA) B: ACN (0.05% TFA); Gradient: 20% B for 1 min, increase to 80% B within 20 min, increase to 95% B within 1 min, hold for 5 min, back to 20% B within 0.1 min. Flow Rate: 1 mL/min; Column: XBridge Peptide BEH C18, 4.6*150mm,3.5 μm. Column Temperature: 40 °C. Purity by SFC: 99.83%, Column AD-H: RT 1.71 min; 100%, Column AS-H: RT 3.53 min; 100%, Column OD-H: RT 1.48 min; 99.70%, Column OJ-H: RT 2.42 min.

[0788] Example 7. Synthesis of a compound.



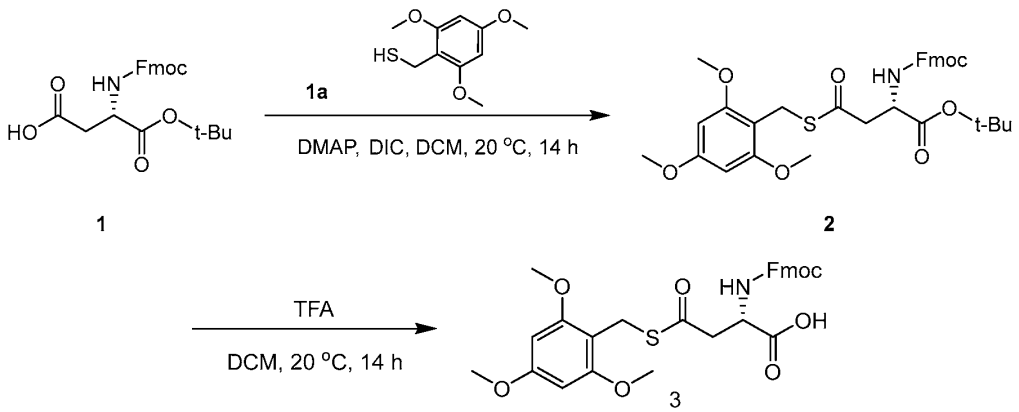
[0789] Preparation of compound 2. A mixture of compound 1 (30.0 g, 340 mmol, 31.5 mL, 1 *eq*), t-BuOH (27.7 g, 374 mmol, 35.8 mL, 1.1 *eq*), TEA (68.9 g, 681 mmol, 94.7 mL, 2 *eq*), and 4-pyrrolidin-1-ylpyridine (2.52 g, 17.0 mmol, 0.05 *eq*) in dioxane (20 mL) was stirred at -20 °C for 0.5 hr and then Boc_2O (96.6 g, 442 mmol, 101 mL, 1.3 *eq*) was added. The resulting mixture was stirred at 20 °C for 7.5 hrs. TLC (petroleum ether/ethyl acetate = 10/1) showed starting material (R_f = 0.1) was consumed completely. The mixture was diluted with DCM (100 mL), washed with 2N HCl (100 mL*2) and sat.aq.$NaHCO_3$ (100 mL), dried over anhydrous sodium sulfate and filtered. The filtrate was purified through distillation (62 °C) under reduced pressure (vacuum degree:-0.95MPa) to give compound 2 (27.0 g, 187 mmol, 55.0% yield) as a colorless oil. ^{1}H NMR: 400 MHz CDCl3: δ = 3.71 (s, 1H), 2.39-2.46 (m, 1H), 1.45 (s, 9H), 1.12 (d, *J* = 8.0 Hz, 6H).

[0790] Preparation of compound 3. To a solution of i-Pr_2NH (28.2 g, 279 mmol, 39.4 mL, 1.15 *eq*) in THF (80.0 mL) was added drop-wise n-BuLi (2.5 M, 106 mL, 1.1 *eq*) at -78 °C and stirred for 1 hr.

The fresh prepared LDA was added drop-wise to a solution of compound 2 (35.0 g, 242 mmol, 1 *eq*) in THF (80.0 mL) at 0 °C. After addition, the reaction was stirred at 20 °C for 1 hr before cooling back to 0 °C. A solution of compound 2a (39.7 g, 266 mmol, 28.7 mL, 80% purity, 1.1 *eq*) in THF (20.0 mL) was added drop-wise. The resulting mixture was stirred at 20 °C for 10 hrs. TLC (petroleum ether/ethyl acetate = 5/1) showed new spot (R_f = 0.65) formed. The mixture was quenched with water (150 mL), the organic phase was separated and the aqueous layer extracted with MTBE (3 x 60.0 mL). The combined organic layers were washed with a saturated aqueous NaCl solution, dried over sodium sulphate, filtered and concentrated in vacuo. The obtained crude oil was distilled (94 °C, -0.95Mpa) to give compound 3 (27.0 g, 148 mmol, 61.0% yield) as a colorless oil. ^{1}H NMR: 400 MHz $CDCl_3$: δ = 2.39 (d, J = 8.0 Hz, 2H), 1.99 (t, J = 4.0 Hz, 1H), 1.45 (s, 9H), 1.24 (s, 6H).

[0791] Preparation of compound 4. To a solution of compound 3 (16.7 g, 119 mmol, 1.2 *eq*) in THF (200 mL) was added a solution of $CuSO_4$•$5H_2O$ (868 mg, 3.48 mmol, 0.035 *eq*) and L-Ascorbic Acid Sodium Salt (5.12 g, 25.8 mmol, 0.26 *eq*) in H_2O (100 mL) followed by addition of a solution of compound 3a (35 g, 99.33 mmol, 1 *eq*) in THF (200 mL) and H_2O (200 mL). The resulting mixture was stirred at 30 °C for 12 hrs. LCMS showed desired MS (Rt = 0.977 min) was detected. The mixture was concentrated under vacuum to remove THF and white solids were precipitated out, filtered. The solid was triturated with MeOH/H_2O (1/1, 2 L) to give compound 4 (22.0 g, 39.7 mmol, 40.0% yield, 96.5% purity) as a white solid. In one LCMS run: Rt = 0.977 min, m/z: $[M+H]^+$ = 535.4. In another LCMS run: Rt = 0.956 min, m/z: $[M+H]^+$ = 535.3. In a HPLC run: Rt = 2.601 min. ^{1}H NMR: 400 MHz DMSO-d6: δ = 7.88 (d, J = 8.0 Hz, 2H), 7.63-7.71 (m, 4H), 7.41 (t, J = 8.0 Hz, 2H), 7.32 (t, J = 8.0 Hz, 2H), 4.75 (s, 1H), 4.33-4.68 (m, 2H), 4.10-4.29 (m, 3H), 2.75 (s, 2H), 1.36 (s, 9 H), 1.02 (d, J = 2.4 Hz, 1H).

[0792] **Example 8. Synthesis of a compound.**



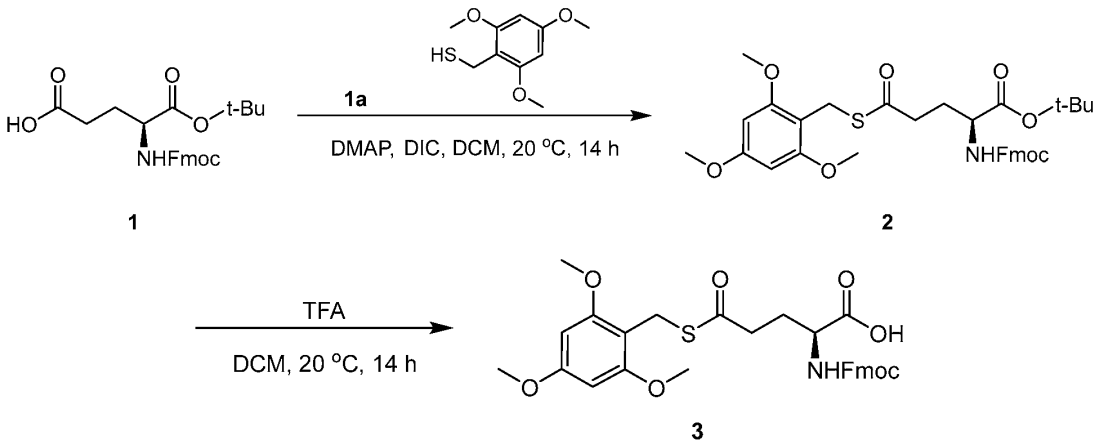
1 2 3

[0793] To a solution of compound 1a (5.00 g, 23.3 mmol, 1.00 *eq*), compound 1 (14.4 g, 35.0 mmol, 1.50 *eq*) and DMAP (142 mg, 1.17 mmol, 0.050 *eq*) in dichloromethane (80.0 mL) was added DIC (3.59

g, 28.4 mmol, 4.41 mL, 1.22 *eq*) under a nitrogen atmosphere. The reaction was stirred at 20°C for 14 hrs. LCMS showed the starting material was consumed completely with desired mass (in one run, Rt = 1.080 min) was detected. TLC (Petroleum ether : Ethyl acetate = 3:1) also showed the starting material (Rf = 0.89) was consumed completely with six new spots (R_f = 0.37) formed. The mixture was filtered and the precipitate was washed with dichloromethane (10.0 mL*3). The filtrate was concentrated under reduced pressure. The residue was purified by column chromatography (SiO_2, Petroleum ether : Ethyl acetate = 50:1 to 2:1, R_f = 0.37). The compound 2 (14.9 g, crude) was obtained as yellow oil. LCMS: product: Rt = 1.080 min, m/z = 630 $(M+H)^+$. ^{1}HNMR: $CDCl_3$, 400 MHz: δ: 7.71 (d, J = 7.6 Hz, 2H), 7.62 (d, J = 7.6 Hz, 2H), 7.41 (t, J = 7.6 Hz, 2H), 7.32 (td, J_1 = 7.6 Hz, J_2 = 0.8 Hz, 2H), 6.10 (s, 2H), 5.80 (d, J = 8.4 Hz, 1H), 4.55 - 4.51 (m, 1H), 4.42 - 4.36 (m, 2H), 4.30 - 4.22 (m, 3H), 3.80 - 3.79 (m, 9H), 3.24 - 3.04 (m, 2H), 1.49 (s, 9H).

[0794] To a solution of compound 2 (12.9 g, 21.2 mmol, 1.00 *eq*) in dichloromethane (45.0 mL) was added TFA (23.1 g, 202 mmol, 15.0 mL, 9.54 *eq*), the reaction was stirred at 20°C for 14 hrs. LCMS showed the starting material was consumed completely with desired mass (Rt = 0.828 min, m/z = 550) was detected. The volatiles (Dichloromethane, TFA) was removed under reduced pressure. The crude product was purified by reversed-phase HPLC (FA). Compound 3 (5.52 g, 9.64 mmol, 45.4% yield, 96.3% purity) was obtained as light yellow solid. In a LCMS run: product: Rt = 0.828 min, m/z = 550.2 $(M-H)^-$. In another LCMS run: product: R_t = 0.835 min, m/z = 550.2 $(M-H)^-$. HPLC: product: R_t = 3.566 min, purity: 96.3%. ^{1}HNMR: $CDCl_3$, 400 MHz: δ: 7.77 (d, J = 7.6 Hz, 2H), 7.61 (d, J = 7.2 Hz, 2H), 7.41 (t, J = 7.6 Hz, 2H), 7.32 (td, J_1 = 7.6 Hz, J_2 = 0.8 Hz, 2H), 6.10 (s, 2H), 5.82 (d, J = 8.0 Hz, 1H), 4.70 - 4.67 (m, 1H), 4.44 - 4.39 (m, 2H), 4.28 - 4.26 (m, 2H), 4.25 - 4.23 (m, 1H), 3.80 (s, 9H), 3.35 - 3.31 (m, 2H).

[0795] **Example 9. Synthesis of a compound.**



[0796] To a solution of compound 1a (5.00 g, 23.3 mmol, 1.00 *eq*), compound 1 (14.8 g, 35.0 mmol, 1.50 *eq*) and DMAP (142 mg, 1.17 mmol, 0.050 *eq*) in Dichloromethane (80.0 mL) was added DIC (3.59 g, 28.4

mmol, 4.41 mL, 1.22 *eq*) under a nitrogen atmosphere. The reaction was stirred at 20°C for 14 hrs. LCMS showed the starting material was consumed completely with desired mass (Rt = 1.081 min) was detected. TLC (Petroleum ether : Ethyl acetate = 3:1) also showed the starting material (Rf = 0.88) was consumed completely with six new spots (Rf = 0.30) formed. The mixture was filtered and the precipitate was washed with Dichloromethane (10.0 mL*3). The filtrate was concentrated under reduced pressure. The residue was purified by column chromatography (SiO_2, Petroleum ether : Ethyl acetate = 50:1 to 2:1, Rf = 0.30). The compound 2 (15.8 g, crude) was obtained as colorless oil. LCMS: product: Rt = 1.081 min, m/z = 644 $(M+H)^+$. ^{1}HNMR: $CDCl_3$, 400 MHz δ: 7.77 (d, J = 7.2 Hz, 2H), 7.61 (d, J = 7.6 Hz, 2H), 7.40 (t, J = 7.6 Hz, 2H), 7.32 (tt, J_1 = 7.6 Hz, J_2 = 1.2Hz, 2H), 6.10 (s, 2H), 5.39 (d, J = 8.0 Hz, 1H), 4.47 - 4.34 (m, 2H), 4.31 - 4.25 (m, 1H), 4.24 - 4.20 (m, 3H), 3.80 (s, 9H), 2.67 - 2.53 (m, 2H), 2.28 -.20 (m, 1H), 2.03 -1.99 (m, 1H), 1.48 (s, 9H).

[0797] To a solution of compound 2 (15.8 g, 25.4 mmol, 1.00 *eq*) in dichloromethane (45.0 mL) was added TFA (23.1 g, 202 mmol, 15.0 mL, 7.97 *eq*), the reaction was stirred at 20°C for 14 hrs. LCMS showed the starting material was consumed completely with desired mass (Rt = 0.829 min, m/z = 564) was detected. The volatiles (Dichloromethane, TFA) was removed under reduced pressure. The crude product was purified by reversed-phase HPLC (FA). Compound 3(6.57 g, 11.4 mmol, 45.1% yield, 98.7% purity) was obtained as white solid. In a LCMS run: product: Rt = 0.829 min, m/z = 564.3 $(M-H)^-$. In another LCMS run: product: Rt = 0.838 min, m/z = 564.3 $(M-H)^-$. In a HPLC run: product: Rt = 3.593 min, purity: 98.7%. ^{1}HNMR: $CDCl_3$, 400 MHz: δ: 7.76 (d, J = 7.6 Hz, 2H), 7.60 (d, J = 7.2 Hz, 2H), 7.40 (t, J = 7.6 Hz, 2H), 7.32 (t, J_1 = 7.6 Hz, 2H), 6.10 (s, 2H), 5.53 (d, J = 8.0 Hz, 1H), 4.53 - 4.46 (m, 3H), 4.27 - 4.21 (m, 3H), 3.79 (s, 9H), 2.77 - 2.53 (m, 2H), 2.33 - 2.28, m, 1H), 2.16 - 2.04, m. 1H).

[0798] In some embodiments, it was confirmed that various peptides, e.g., stapled peptides, comprising residues of amino acids described herein can provide higher affinity than reference peptides that comprise a reference amino acid, e.g., a natural amino acid such as Asp or Glu, but are otherwise identical.

[0799] While various embodiments have been described and illustrated herein, those of ordinary skill in the art will readily envision a variety of other means and/or structures for performing the functions and/or obtaining the results and/or one or more of the advantages described in the present disclosure, and each of such variations and/or modifications is deemed to be included. More generally, those skilled in the art will readily appreciate that all parameters, dimensions, materials, and configurations described herein are meant to be example and that the actual parameters, dimensions, materials, and/or configurations will depend upon the specific application or applications for which the teachings of the present disclosure is/are used. Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific embodiments of the disclosure described in the present disclosure. It is, therefore, to be understood that the foregoing embodiments are

presented by way of example only and that, provided technologies, including those to be claimed, may be practiced otherwise than as specifically described and claimed. In addition, any combination of two or more features, systems, articles, materials, kits, and/or methods, if such features, systems, articles, materials, kits, and/or methods are not mutually inconsistent, is included within the scope of the present disclosure.

CLAIMS

1. An agent, wherein the agent is or comprise a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic group;

X^5 comprises a side chain comprising an acidic group;

X^6 comprises a side chain comprising an acidic group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4 are stapled and X^4 and X^{11} are stapled.

2. An agent, wherein the agent is or comprise a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group; and

X^{13} comprises a side chain comprising an optionally substituted aromatic group.

3. An agent, wherein the agent is or comprises:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}[X^{18}]_{p18}[X^{19}]_{p19}[X^{20}]_{p20}[X^{21}]_{p21}[X^{22}]_{p22}[X^{23}]_{p23},$$

wherein each of p14, p15, p16, p17, p18, p19, p20, p21, p22, and p23 is independently 0 or 1, and each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, X^{17}, X^{18}, X^{19}, X^{20}, X^{21}, X^{22}, and X^{23} is independently an amino acid residue.

4. An agent, wherein the agent is or comprises:

$$[X]_pX^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}X^{14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}[X]_{p'},$$

wherein:

each of p15, p16 and p17 is independently 0 or 1;

each of p and p' is independently 0-10;

each of X, X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue.

5. An agent, wherein the agent is or comprise a peptide comprising:

$$X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17},$$

wherein:

each of p14, p15, p16 and p17 is independently 0 or 1;

each of X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, X^{16}, and X^{17} is independently an amino acid residue, wherein:

X^2 comprises a side chain comprising an acidic or polar group;

X^5 comprises a side chain comprising an acidic or polar group;

X^9 comprises a side chain comprising an optionally substituted aromatic group;

X^{12} comprises a side chain comprising an optionally substituted aromatic group;

X^{13} comprises a side chain comprising an optionally substituted aromatic group; and wherein:

X^1 and X^4, and/or X^4 and X^{11} are independently amino acid residues suitable for stapling, or are stapled, or X^3 and X^{10} are independently amino acid residues suitable for stapling, or are stapled.

6. A agent having the structure of formula I:

$$R^N–L^{P1}–L^{AA1}–L^{P2}–L^{AA2}–L^{P3}–L^{AA3}–L^{P4}–L^{AA4}–L^{P5}–L^{AA5}–L^{P6}–L^{AA6}–L^{P7}–R^C,$$

I

or a salt thereof, wherein:

R^N is a peptide, an amino protecting group or R'–L^{RN}–;

each of L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} is independently L, wherein L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} comprise:

a first R' group and a second R' group which are taken together to form –L^s– which is bonded to the atom to which a first R' group is attached and the atom to which a second R' group is attached; and

a third R' group and a fourth R' group which are taken together to form –L^s– which is bonded to the atom to which a third R' group is attached and the atom to which a fourth R' group is attached;

each L^s is independently –L^{s1}–L^{s2}–L^{s3}–, wherein each L^{s1}, L^{s2} and L^{s3} is independently L;

L^{AA1} is an amino acid residue that comprises a side chain comprising an acidic or polar group;

L^{AA2} is an amino acid residue that comprises a side chain comprising an acidic or polar group;

L^{AA3} is an amino acid residue;

L^{AA4} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

L^{AA5} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

L^{AA6} is an amino acid residue that comprises a side chain comprising an optionally substituted aromatic group;

R^C is a peptide, a carboxyl protecting group, $-L^{RC}-R'$, $-O-L^{RC}-R'$ or $-N(R')-L^{RC}-R'$;

each of L^{RN} and L^{RC} is independently L;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each $-Cy-$ is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently $-L-R$, $-C(O)R$, $-CO_2R$, or $-SO_2R$;

each R is independently $-H$, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

7. A agent having the structure of formula I:

$$R^N-L^{P1}-L^{AA1}-L^{P2}-L^{AA2}-L^{P3}-L^{AA3}-L^{P4}-L^{AA4}-L^{P5}-L^{AA5}-L^{P6}-L^{AA6}-L^{P7}-R^C,$$

I

or a salt thereof, wherein:

R^N is a peptide, an amino protecting group or $R'-L^{RN}-$;

each of L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} is independently L, wherein L^{P1}, L^{P2}, L^{P3}, L^{P4}, L^{P5}, L^{P6}, and L^{P7} comprise:

a first R' group and a second R' group which are taken together to form $-L^{s}-$ which is bonded to the atom to which a first R' group is attached and the atom to which a second R' group is attached; and

a third R' group and a fourth R' group which are taken together to form $-L^{s}-$ which is bonded to the atom to which a third R' group is attached and the atom to which a fourth R' group is attached;

each L^{s} is independently $-L^{s1}-L^{s2}-L^{s3}-$, wherein each L^{s1}, L^{s2} and L^{s3} is independently L;

L^{AA1} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS1}-R^{AA1}$, wherein R^{AA1} is $-CO_2R$ or $-SO_2R$;

L^{AA2} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS2}-R^{AA2}$, wherein R^{AA2} is $-CO_2R$, or $-SO_2R$;

L^{AA3} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS3}-R^{AA3}$, wherein R^{AA3} is R';

L^{AA4} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS4}-R^{AA4}$, wherein R^{AA4} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

L^{AA5} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS5}-R^{AA5}$, wherein R^{AA5} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

L^{AA6} is L^{AR}, wherein a methylene unit is replaced with $-C(R')(R^{AS})-$, wherein R^{AS} is $-L^{AS6}-R^{AA6}$, wherein R^{AA6} is an optionally substituted group selected from 6-14 membered aryl or 5-14 membered heteroaryl having 1-6 heteroatoms;

R^{C} is a peptide, a carboxyl protecting group, $-L^{RC}-R'$, $-O-L^{RC}-R'$ or $-N(R')-L^{RC}-R'$;

each of L^{RN} and L^{RC} is independently L;

each L^{AR} is independently an optionally substituted, bivalent C_1-C_6 aliphatic group, wherein one or more methylene units of the group are optionally and independently replaced with $-C(R')_2-$, $-C(R')(R^{AS})-$,$-Cy-$, $-O-$, $-S-$, $-S-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$;

each of L^{AS1}, L^{AS2}, L^{AS3}, L^{AS4}, L^{AS5}, and L^{AS6} is independently L^{AS};

each R^{AS} is independently $-L^{AS}-R'$;

each L^{AS} is independently a covalent bond or an optionally substituted, bivalent C_1-C_{10} aliphatic or heteroaliphatic group having 1-5 heteroatoms, wherein one or more methylene units of the group

optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −L−R, −C(O)R, −CO$_2$R, or −SO$_2$R;

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

8. The agent of any one of the preceding claims, wherein a second R' group and a third R' group are attached to the same atom, and wherein each of the first, second and fourth R' groups is independently attached to a different atom, or:

wherein X^1 and X^4, and X^4 and X^{11} are independently stapled.

9. The agent of claim 8, wherein the agent comprises a staple having the structure of L^s which is $-L^{s1}-L^{s2}-L^{s3}-$.

10. The agent of claim 9, wherein L^{s1} is a covalent bond, or an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with −C(R')$_2$−, −Cy−, −O−, −S−, −S−S−, –S–Cy–S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, −S(O)$_2$−, −S(O)$_2$N(R')−, −C(O)S−, or −C(O)O−.

11. The agent of claim 10, wherein L^{s1} is bond to a backbone carbon atom or nitrogen atom, or an alpha carbon atom of an amino acid residue.

12. The agent of claim 11, wherein L^{s2} is a covalent bond, or an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-S-Cy-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

13. The agent of claim 12, wherein L^{s3} is a covalent bond, or an optionally substituted bivalent linear or branched, saturated or partially unsaturated C_{1-10} hydrocarbon chain, wherein one or more methylene units are optionally and independently replaced with $-C(R')_2-$, $-Cy-$, $-O-$, $-S-$, $-S-S-$, $-S-Cy-S-$, $-N(R')-$, $-C(O)-$, $-C(S)-$, $-C(NR')-$, $-C(O)N(R')-$, $-N(R')C(O)N(R')-$, $-N(R')C(O)O-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2N(R')-$, $-C(O)S-$, or $-C(O)O-$.

14. The agent of claim 13, wherein L^{s3} is a bivalent C_{1-6} aliphatic wherein one or more methylene units are independently replaced with $-N(R')-$.

15. The agent of claim 14, wherein L^{s3} is bond to a carbon atom of the peptide backbone, or wherein L^{s3} is bond to an alpha carbon atom of an amino acid residue, or wherein L^{s3} is bond to a nitrogen atom of the peptide backbone.

16. The agent of claim 8, wherein the agent comprises a staple having the structure of $-(CH_2)m-N(R')-C(O)-O-(CH_2)n-CH=CH-(CH_2)n'-$, wherein each of m, n and n' is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10, and each $-CH_2-$ is independently optionally substituted.

17. The agent of any one of the preceding claims, wherein X^1 is $-N(R^{a1})-L^{a1}-C(-L^a-R^{SP1})(R^{a3})-L^{a2}-C(O)-$.

18. The agent of any one of the preceding claims, wherein X^4 is a residue of an amino acid that comprises two olefins each independently suitable for stapling, or wherein X^4 has the structure of $-N(R^{a1})-L^{a1}-C(-L^a-R^{SP1})(-L^a-R^{SP2})-L^{a2}-C(O)-$.

19. The agent of any one of the preceding claims, wherein X^4 is B5.

20. The agent of any one of the preceding claims, wherein X^{11} is an amino acid residue suitable for stapling, or wherein X^{11} is $-N(R^{a1})-L^{a1}-C(-L^a-R^{SP1})(R^{a3})-L^{a2}-C(O)-$.

21. The agent of any one of claims 1-5, wherein X^2 or L^{AA1} comprises a side chain comprising $-COOH$ or a salt form thereof.

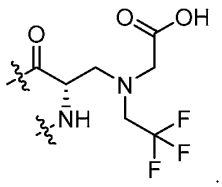
22. The agent of claim 21, wherein X^2 or L^{AA1} is Asp or Glu.

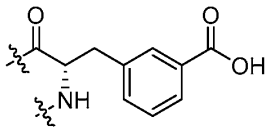
23. The agent of claim 21, wherein X^5 or L^{AA2} comprises a side chain comprising $-COOH$ or a salt form thereof.

24. The agent of claim 22, wherein X^5 or L^{AA2} is Asp or Glu.

25. The agent of claim 23, wherein X^6 or L^{AA3} comprises a side chain comprising −COOH or a salt form thereof.

26. The agent of claim 21, wherein X^6 or L^{AA3} is Asp or Glu.

27. The agent of claim 21, wherein X^6 or L^{AA3} is  .

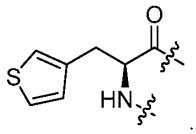
28. The agent of claim 21, wherein X^6 or L^{AA3} is  .

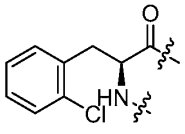
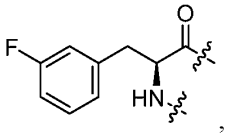
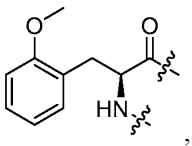
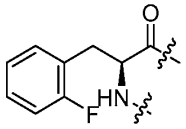
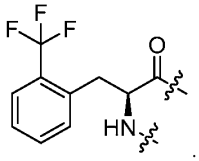
29. The agent of claim 25, wherein X^9 or L^{AA4} comprises a side chain which is or comprises an optionally substituted aromatic group.

30. The agent of claim 29, wherein X^9 or L^{AA4} is Phe.

31. The agent of claim 29, wherein X^{12} or L^{A52} comprises a side chain which is or comprises an optionally substituted aromatic group.

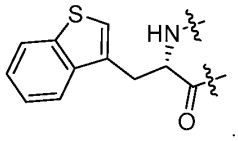
32. The agent of claim 31, wherein X^{12} or L^{AA5} is Phe.

33. The agent of claim 31, wherein X^{12} or L^{AA5} is  .

34. The agent of claim 31, wherein X^{12} or L^{AA5} is  ,  ,  ,  , or  .

35. The agent of claim 31, wherein the side chain of X^{13} or L^{AA6} comprises an optionally substituted aromatic group.

36. The agent of claim 35, wherein the side chain of X^{13} or L^{AA6} comprises an optionally substituted 9-membered bicyclic heteroaryl group having 1-3 heteroatoms.

37. The agent of claim 35, wherein X^{13} or L^{AA6} is  .

38. The agent of claim 35, wherein X^{13} or L^{AA6} is Trp.

39. The agent of any one of the preceding claims, wherein p14 is 1.

40. The agent of any one of the preceding claims, wherein X^{14} comprises a side chain comprising a polar group.

41. The agent of any one of the preceding claims, wherein the peptide has the structure of:

$R^N–[X]_p–X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}[X^{14}]_{p14}[X^{15}]_{p15}[X^{16}]_{p16}[X^{17}]_{p17}–[X]_{p'}–R^C$,

or a salt thereof, wherein:

each X is independently an amino acid residue;

each p and p' is independently 0-10;

R^N is independently a peptide, an amino protecting group or $R'–L^{RN}–$;

R^C is independently a peptide, a carboxyl protecting group, $–L^{RC}–R'$, $–O–L^{RC}–R'$ or $–N(R')–L^{RC}–R'$;

each of L^{RN} and L^{RC} is independently L;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms, wherein one or more methylene units of the group are optionally and independently replaced with $–C(R')_2–$, –Cy–, –O–, –S–, –S–S–, $–N(R')–$, $–C(O)–$, $–C(S)–$, $–C(NR')–$, $–C(O)N(R')–$, $–N(R')C(O)N(R')–$, $–N(R')C(O)O–$, $–S(O)–$, $–S(O)_2–$, $–S(O)_2N(R')–$, $–C(O)S–$, or $–C(O)O–$;

each –Cy– is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently –L–R, $–C(O)R$, $–CO_2R$, or $–SO_2R$;

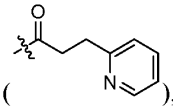
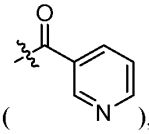
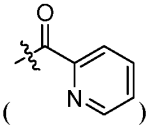
each R is independently –H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

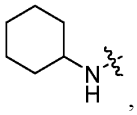
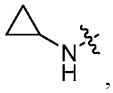
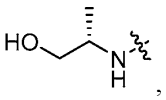
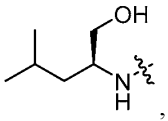
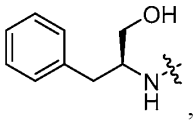
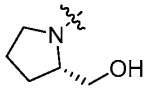
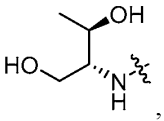
two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

42. The agent of any one of the preceding claims, wherein R^N is $-C(O)R$.

43. The agent of any one of the preceding claims, wherein R^N is Ac, AzAc ($N_3-CH_2-C(O)-$), 2PyPrpc (), MeOPr ($CH_3OCH_2CH_2C(O)-$), $MeSO_2$ ($-SO_2CH_3$), mPEG2 ($CH_3OCH_2CH_2OCH_2CH_2C(O)-$), Nic (),Oct ($CH_3(CH_2)_6C(O)-$), or Pic ().

44. The agent of any one of the preceding claims, wherein R^C is $-N(R')_2$, or wherein R^C is $-NH_2$, $-NHEt$, $-NHBn$,  ,  , $-NH-(CH_2)_6-NH_2$, $-NH-(CH_2)_6-N_3$,  ,  ,  ,  ,  , or $-OH$.

45. The agent of any one of the preceding claims, wherein the peptide forms a structure that comprises a helix.

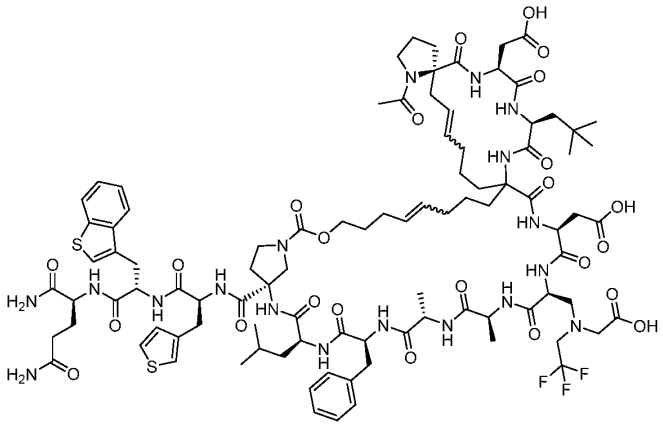
46. The agent of any one of the preceding claims, wherein the peptide binds to beta-catenin with a EC50 of no more than about 2000 nM, or no more than about 1500 nM, or no more than about 1000 nM, or no more than about 500 nM, or no more than about 300 nM, or no more than about 200 nM, or no more than about 100 nM, or no more than about 75 nM, or no more than about 50 nM, or no more than about 25 nM, or no more than about 10 nM as measured by fluorescence polarization.

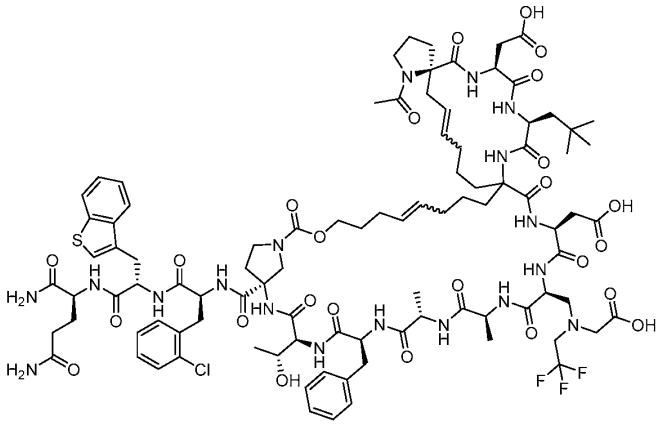
47. The agent of any one of the preceding claims, wherein the peptide binds to a polypeptide whose sequence is or comprising SEQ ID NO: 2, or a fragment thereof:
SVLFYAITTLHNLLLHQEGAKMAVRLAGGLQKMVALLNKTNVKFLAITTDCLQILAYGNQESKL IILASGGPQALVNIMRTYTYEKLLWTTSRVLKVLSVCSSNKPAIVEAGGMQALGLHLTDPSQRLV QNCLWTLRNLSDAATKQEGMEGLLGTLVQLLGSDDINVVTCAAGILSNLTCNNYKNKMMVCQ VGGIEALVRT (SEQ ID NO: 2).

48. The agent of any one of the preceding claims, wherein the agent interacts with G307 of beta-catenin or an amino acid residue corresponding thereto, K312 of beta-catenin or an amino acid residue corresponding thereto, K345 of beta-catenin or an amino acid residue corresponding thereto, W383 of

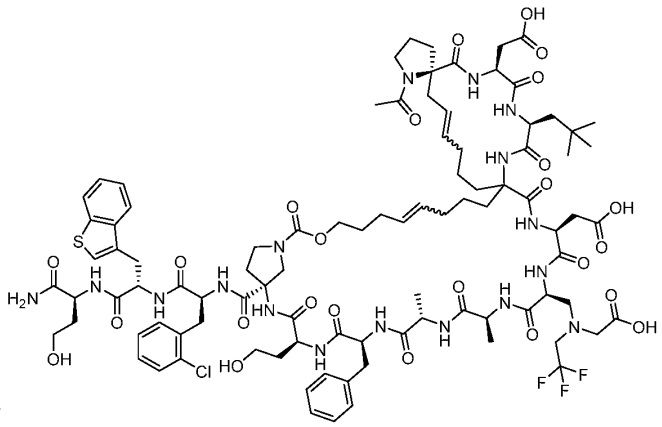
beta-catenin or an amino acid residue corresponding thereto, N387 of beta-catenin or an amino acid residue corresponding thereto, D413 of beta-catenin or an amino acid residue corresponding thereto, and/or N415 of beta-catenin or an amino acid residue corresponding thereto.

49. An agent having a structure selected from Table E3 or a salt thereof.

50. An agent has the structure of  or a salt thereof; or



an agent has the structure of or a salt thereof; or

an agent has the structure of  or a salt thereof.

51. The agent of claim 50, wherein a double bond of a staple bonded to the first amino acid from the N-terminus is *E*.

52. The agent of claim 50, wherein a double bond of a staple bonded to the first amino acid from the N-terminus is *Z*.

53. The agent of any one of claims 50-52, wherein a double bond of a staple bonded to the 11th amino acid from the N-terminus is *E*.

54. The agent of any one of claims 50-52, wherein a double bond of a staple bonded to the 11th amino acid from the N-terminus is *Z*.

55. A compound having the structure of formula PA:

$$N(R^{PA})(R^{a1})–L^{a1}–C(R^{a2})(R^{a3})–L^{a2}–C(O)R^{PC},$$

PA

or a salt thereof, wherein:

R^{PA} is −H or an amino protecting group;

each of R^{a1} and R^{a3} is independently $-L^{a}–R'$;

R^{a2} is $–L^{aa}–C(O)R^{PS}$;

each of L^{a}, L^{a1} and L^{a2} is independently L;

$−C(O)R^{PS}$ is optionally protected or activated −COOH;

$−C(O)R^{PC}$ is optionally protected or activated −COOH;

each L is independently a covalent bond, or an optionally substituted, bivalent C_1-C_{25} aliphatic or heteroaliphatic group having 1-10 heteroatoms wherein one or more methylene units of the group are optionally and independently replaced with $−C(R')_2–$, −Cy−, −O−, −S−, −S−S−, −N(R')−, −C(O)−, −C(S)−, −C(NR')−, −C(O)N(R')−, −N(R')C(O)N(R')−, −N(R')C(O)O−, −S(O)−, $–S(O)_2–$, $–S(O)_2N(R')–$, −C(O)S−, or −C(O)O−;

each −Cy− is independently an optionally substituted bivalent, 3-30 membered, monocyclic, bicyclic or polycyclic ring having 0-10 heteroatoms;

each R' is independently −R, −C(O)R, −CO_2R, or −SO_2R; and

each R is independently −H, or an optionally substituted group selected from C_{1-30} aliphatic, C_{1-30} heteroaliphatic having 1-10 heteroatoms, C_{6-30} aryl, C_{6-30} arylaliphatic, C_{6-30} arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

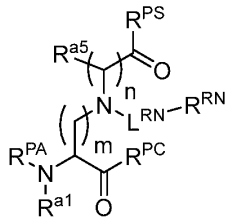
two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atom(s) to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atom(s), 0-10 heteroatoms.

56. The compound of claim 55, wherein L^{aa} is L and L^{aa} comprises −N(R')− or −Cy−.

57. The compound of claim 55, having the structure of:



or a salt thereof, wherein:

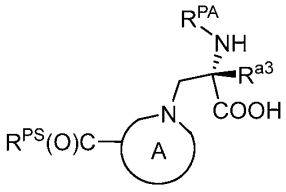
each of m and n is independently 1, 2, 3, or 4;

L^{RN} is L;

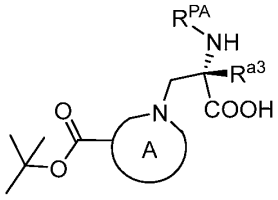
R^{RN} is R; and

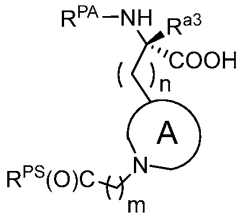
R^{a5} is R'.

58. The compound of claim 55, wherein the compound has the structure of



or a salt thereof, wherein Ring A is an optionally substituted 3-7 membered saturated, partially unsaturated or aromatic ring; or

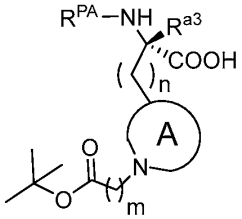
wherein the compound has the structure of  or a salt thereof, wherein Ring A is an optionally substituted 3-7 membered saturated, partially unsaturated or aromatic ring; or

wherein the compound has the structure of  or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

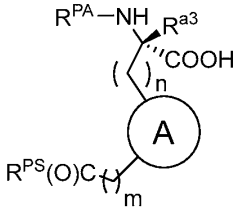
m is 0, 1, 2, or 3; or

wherein the compound has the structure of  or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

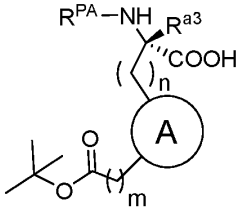
m is 0, 1, 2, or 3; or

wherein the compound has the structure of  or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

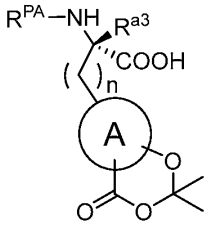
m is 0, 1, 2, or 3; or

wherein the compound has the structure of  or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring;

n is 0, 1, or 2; and

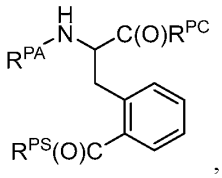
m is 0, 1, 2, or 3; or

wherein the compound has the structure of  or a salt thereof, wherein:

Ring A is an optionally substituted 3-10 membered ring; and

n is 0, 1, or 2.

59. A compound having the structure of:

 ,

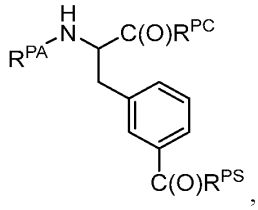
or a salt thereof, wherein:

R^{PA} is −H or an amino protecting group;

$-C(O)R^{PS}$ is optionally protected or activated −COOH; and

$-C(O)R^{PC}$ is optionally protected or activated −COOH.

60. A compound having the structure of:



or a salt thereof, wherein:

R^{PA} is −H or an amino protecting group;

$-C(O)R^{PS}$ is optionally protected or activated −COOH; and

$-C(O)R^{PC}$ is optionally protected or activated −COOH.

61. The compound of any one of claims 55-61, wherein R^{PA} is an amino protecting group suitable for peptide synthesis.

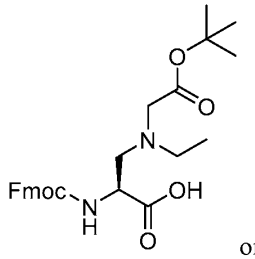
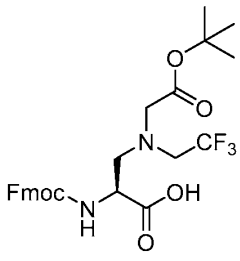
62. The compound of any one of claims 55-61, wherein R^{PA} is −C(O)−O−R; or wherein R^{PA} is −Fmoc.

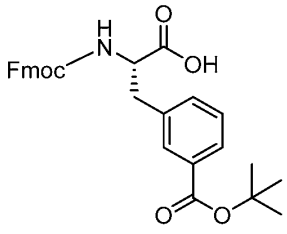
63. The compound of any one of claims 55-62, wherein $-C(O)R^{PS}$ is −C(O)OR'.

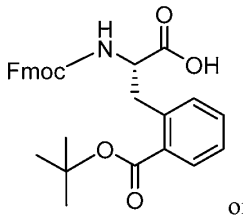
64. The compound of claim 63, wherein R' is −H.

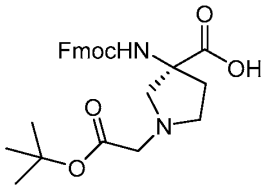
65. The compound of claim 63, wherein R' is optionally substituted C_{1-6} aliphatic.

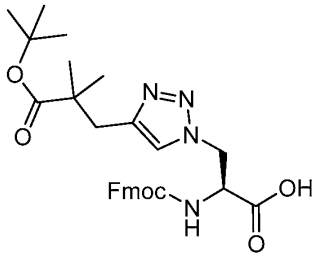
66. The compound of any one of claims 55-62, $-C(O)R^{PS}$ is −C(O)S−L−R'.

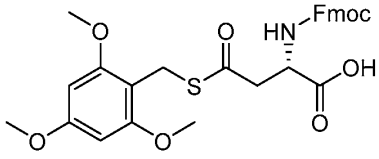
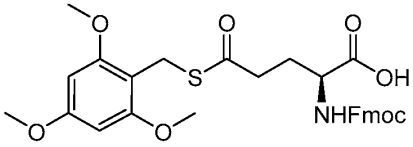
67. A compound, wherein the compound is  or a salt thereof, or wherein the compound is  or a salt thereof.

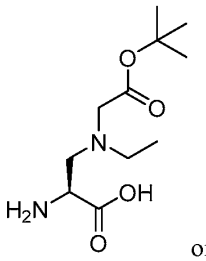
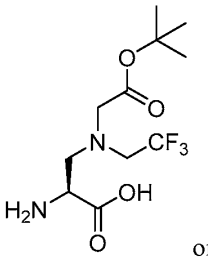
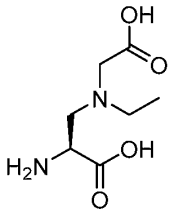
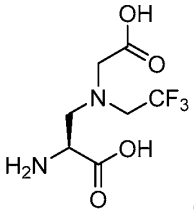
68. A compound, wherein the compound is  or a salt thereof.

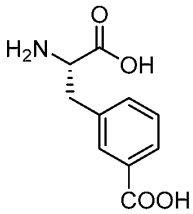
69. A compound, wherein the compound is  or a salt thereof.

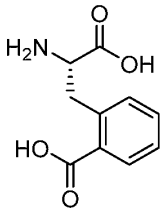
70. A compound, wherein the compound is  or a salt thereof.

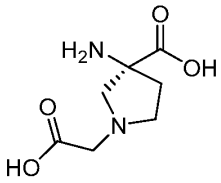
71. A compound, wherein the compound is  or a salt thereof.

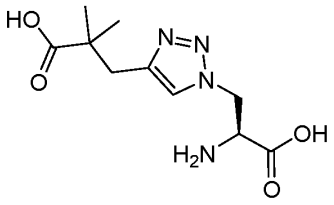
72. A compound, wherein the compound is  or a salt thereof, or wherein the compound is  or a salt thereof.

73. A compound, wherein the compound is  or a salt thereof, or wherein the compound is  or a salt thereof, or wherein the compound is  or a salt thereof, or wherein the compound is  or a salt thereof.

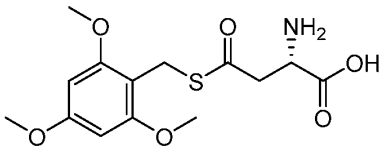
74. A compound, wherein the compound is  or a salt thereof.

75. A compound, wherein the compound is  or a salt thereof.

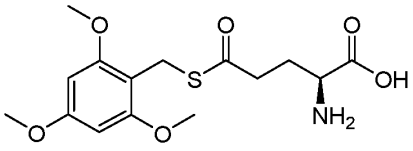
76. A compound, wherein the compound is  or a salt thereof.



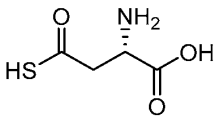
77. A compound, wherein the compound is or a salt thereof.



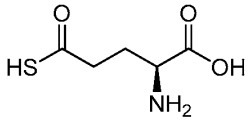
78. A compound, wherein the compound is or a salt thereof, or wherein the compound is



or a salt thereof, wherein the compound is



or a salt thereof, or wherein the compound is

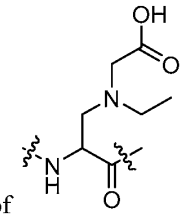


or a salt thereof.

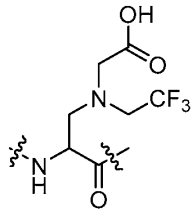
79. The compound of any one of the preceding claims, wherein the compound has a purity of at least about 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, or 99%.

80. A compound, comprising a residue of Table A-IV.

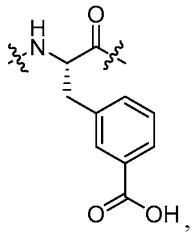
81. A compound, comprising a residue having the structure of



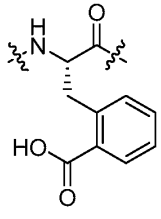
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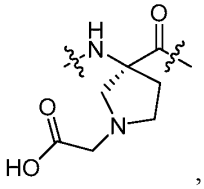
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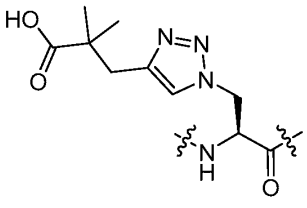
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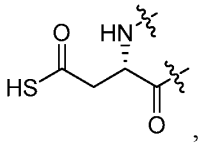
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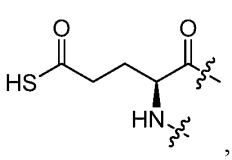
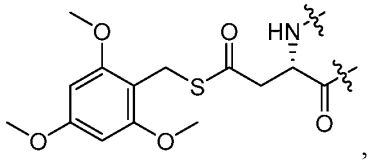
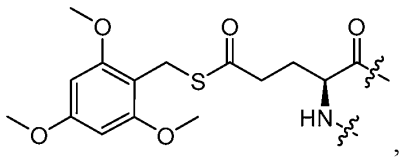
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, or

, or a salt form thereof.

82. The compound of claim 81, wherein the compound is or comprise a peptide, or wherein the compound is or comprise a stapled peptide.

83. A method for preparing a compound of claim 81 or 82, comprising utilization of a compound of any one of the claims 55-79.

84. The agent of any one of the preceding claims, wherein each olefin double bond in a staple is independently and optionally converted into a single bond, or wherein each olefin double bond in a staple is converted into a single bond, or wherein each olefin double bond is converted into a single bond, or wherein each olefin double bond is independently and optionally converted into −CHR'−CHR'−, wherein each R is independently −H, −R, −OR, −OH, $-N(R)_2$, or −SR, or wherein each olefin double bond is converted into −CHR"−CHR"−, wherein each R is independently −H, −R, −OR, −OH, $-N(R)_2$, or −SR, or wherein each olefin double bond is independently and optionally converted into optionally substituted $-CH_2-CH_2-$, or wherein each olefin double bond is converted into $-CH_2-CH_2-$.

85. A pharmaceutical composition, comprising or delivering an agent or amino acid of any one of the preceding claims, and a pharmaceutically acceptable carrier; or

a composition selected from Table E3; or

a pharmaceutical composition, comprising or delivering one or more or all peptide agents in a composition selected from Table E3 and a pharmaceutically acceptable carrier.

86. A method for preparing an agent of any one of the preceding claims, comprising incorporating a residue of an amino acid of any one of the preceding claims.

87. A method for modulating beta-catenin interaction with a partner in a system, comprising contacting beta-catenin with an agent or composition of any one of the preceding claims; or

a method for modulating beta-catenin interaction with a partner in a system, comprising administering or delivering to the system an agent or composition of any one of the preceding claims; or

a method for modulating a TCF-beta-catenin interaction in a system, comprising contacting beta-catenin with an agent or composition of any one of the preceding claims; or

a method for modulating a TCF-beta-catenin interaction in a system, comprising administering or delivering to the system an agent or composition of any one of the preceding claims; or

a method for inhibiting beta-catenin dependent cell proliferation, comprising administering or delivering to the system an agent or composition of any one of the preceding claims; or

a method for modulating a TCF-beta-catenin interaction in a system, comprising administering or delivering to the system an agent or composition of any one of the preceding claims.

88. The method of claim 87, wherein a system is an in vitro system, or wherein a system is or comprises a cell, tissue or organ, or wherein a system is a subject.

89. A method for treating or preventing a condition, disorder or disease associated with beta-catenin in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding claims; or

a method for treating cancer in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding claims; or

a method for treating or preventing a condition, disorder or disease associated with beta-catenin interaction with a partner in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding claims.

90. The method of claim 89, wherein the partner is TCF7, LEF1, TCF7L1, TCF7L2, Axin1, Axin2, or APC.

91. A method for treating or preventing a condition, disorder or disease associated with TCF-beta-catenin interaction in a subject, comprising administering or delivering to the subject an effective amount of an agent or composition of any one of the preceding claims.

92. The method of any one of the preceding claims, wherein the condition, disorder or disease is melanoma.

93. The method of any one of the preceding claims, comprising administering or deliver to a subject a second therapeutic agent or a second therapy.

94. The method of claim 93, wherein a second therapeutic agent or therapy is administered prior to an agent of any one of the preceding claims, or wherein a second therapeutic agent or therapy is administered about or no more than about 1, 2, 3, 4, 5, 6, or 7 days, or 1, 2, 3, or weeks, or 1, 2, 3, 4, 5, or 6 months, prior to an agent of any one of the preceding claims, or wherein a second therapeutic agent or therapy is administered concurrently with an agent of any one of the preceding claims, or wherein a second therapeutic agent or therapy is administered subsequently to an agent of any one of the preceding claims, or wherein a second therapeutic agent or therapy is administered about or no more than about 1, 2, 3, 4, 5, 6, or 7 days, or 1, 2, 3, or weeks, or 1, 2, 3, 4, 5, or 6 months, subsequently to an agent of any one of the preceding claims; and/or:

wherein a subject is exposed to a second therapeutic agent or therapy and an agent of any one of the preceding claims, or wherein a subject is exposed to a therapeutic effect of a second therapeutic agent or therapy and a therapeutic effect of an agent of any one of the preceding claims; and/or:

wherein a second therapeutic agent is or comprises a chemotherapy agent, or wherein a second therapeutic agent is or comprises a hormone therapy agent, or wherein a second therapeutic agent is or comprises an immunotherapy agent, or wherein a second therapeutic agent is or comprises a checkpoint inhibitor, or wherein a second therapeutic agent is or comprises an antibody, or wherein a second therapeutic agent is or comprises a CTLA-4, PD-1 or PD-L1 inhibitor, or wherein a second therapeutic agent is or comprises a cell; and/or:

wherein the second therapeutic agent reduces one or more side effects of an agent or composition of any one of the preceding claims, or wherein the agent or composition reduces one or more side effects of a second therapeutic agent; and/or:

wherein a second therapy is or comprises surgery, or wherein a second therapy is or comprises chemotherapy, or wherein a second therapy is or comprises radiotherapy, or wherein a second therapy is or comprises hormone therapy, or wherein a second therapy is or comprises stem cell or bone marrow transplant, or wherein a second therapy is or comprises immunotherapy, or wherein a second therapy is or comprises T-cell therapy, or wherein a second therapy is or comprises CAR T-cell therapy, or wherein a second therapy is or comprises administering to the subject a population of immune cells, or wherein the agent or composition reduces one or more side effects of a second therapy; and/or:

wherein unit dose of a second therapy or therapeutic agent is reduced compared to when it is administered alone, or wherein total dose of a second therapy or therapeutic agent is reduced compared to when it is administered alone, or wherein unit dose of an agent or composition of any one of the preceding claims is reduced compared to when it is administered alone, or wherein total dose of an agent or composition of any one of the preceding claims is reduced compared to when it is administered alone; and/or:

wherein the combination therapy provides higher efficacy than when an agent or composition is administered or delivered alone, or wherein the combination therapy provides higher efficacy than when a second therapeutic agent or therapy is administered or delivered alone.

95. An agent, compound, composition or method described in the specification or Embodiments 1-1241.