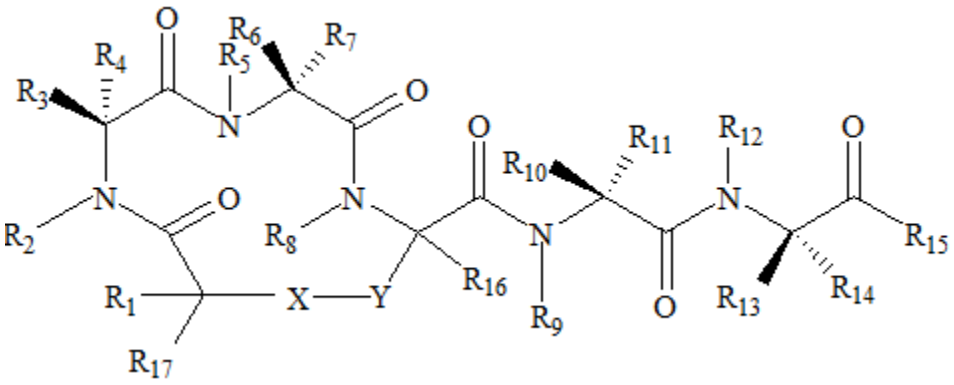
CLAIMS

1. (Currently amended) A compound of formula (I)



(I)

wherein:

(i) R_1 is H, ~~(C3-C8)alkyl, or (C3-C8)aminoalkyl; or H,~~ -CH_3, ~~or~~ -NH_2 or -NH-amino acid~~,~~; and R_{17} is H or CH_3; or R_{17} is H, ~~(C3-C8)alkyl, or (C3-C8)aminoalkyl; or H,~~ CH_3, -NH_2, or -NH-amino-acid ~~or CH_3~~; and R_1 is H or CH_3;

(ii) R_3 is H or a -(C1-C5)alkyl ~~$-(CH_2)p$-(C3-C8)alkyl~~, -(C1-C5)aminoalkyl, -(C1-C5)alkyl-C(=O)OH, $-(CH_2)p$-(C3-C8)heteroaryl, a $-(CH_2)p$-(C3-C8)aryl, a $-(CH_2)p$-(C3-C8)cycloalkyl, or a $-(CH_2)p$-(C3-C8)heterocycloalkyl, wherein p is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the alkyl, aminoalkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, amine, hydroxy, oxo, or a (C1-~~C6~~C5)alkyl; or the side chain of a lysine, ornithine, diaminobutyric acid (Dab), diaminopropionic acid (Dap), citrulline, homolysine, histidine, norleucine, norvaline, glycine or glutamate; and R_4 is H or -CH_3; or

R_4 is H or a -(C1-C5)alkyl ~~$-(CH_2)p$-(C3-C8)alkyl~~, -(C1-C5)aminoalkyl, -(C1-C5)alkyl-C(=O)OH, $-(CH_2)p$-(C3-C8)heteroaryl, a $-(CH_2)p$-(C3-C8)aryl, a $-(CH_2)p$-(C3-C8)cycloalkyl, or a $-(CH_2)p$-(C3-C8)heterocycloalkyl, wherein p is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl~~,~~; and wherein the alkyl, aminoalkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, amine, hydroxy, oxo, or a (C1-C5)alkyl; or the side chain of a lysine, ornithine, diaminobutyric acid (Dab), diaminopropionic acid (Dap), citrulline, homolysine, histidine, norleucine, norvaline, glycine or glutamate; and R_3 is H or -CH_3;

(iii) R_6 is H or a -(C1-C5)alkyl ~~$-(CH_2)p'$-(C3-C8)alkyl~~, -(C1-C5)aminoalkyl, -(C1-C5)alkyl-C(=O)OH, $-(CH_2)p'$-(C3-C8)heteroaryl, a $-(CH_2)p'$-(C3-C8)aryl, a $-(CH_2)p'$-(C3-C8)cycloalkyl, or a $-(CH_2)p'$-(C3-C8)heterocycloalkyl, wherein p' is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the alkyl, aminoalkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each

substituent is independently an halogen, amine, hydroxy, oxo, or a (C1-~~C6~~C5)alkyl; or the side chain of a lysine, ornithine, diaminobutyric acid (Dab), diaminopropionic acid (Dap), citrulline, homolysine, histidine, norleucine, norvaline, glycine or glutamate; and R_7 is H or -CH_3; or

R_7 is H, or a -(C1-C5)alkyl~~-(CH_2)p'-(C3-C8)alkyl~~, -(C1-C5)aminoalkyl, -(C1-C5)alkyl-C(=O)OH, –(CH_2)p'-(C3-C8)heteroaryl, a –(CH_2)p'-(C3-C8)aryl, a –(CH_2)p'-(C3-C8)cycloalkyl, or a –(CH_2)p'-(C3-C8)heterocycloalkyl, wherein p' is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the alkyl, aminoalkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, amine, hydroxy, oxo, or a (C1-~~C6~~C5)alkyl; or the side chain of a lysine, ornithine, diaminobutyric acid (Dab), diaminopropionic acid (Dap), citrulline, homolysine, histidine, norleucine, norvaline, glycine or glutamate; and R_6 is H or -CH_3;

(iv) (a) R_{10} is H, or -(C1-C5)alkyl~~-(CH_2)q-(C3-C8)alkyl~~, –(CH_2)q-(C3-C8)heteroaryl, a –(CH_2)q-(C3-C8)aryl, a –(CH_2)q-(C3-C8)cycloalkyl, or a –(CH_2)q-(C3-C8)heterocycloalkyl, wherein q is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the alkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, hydroxy, amino, trifluoromethyl, cyano, nitro, or a (C1-C6)alkyl; or the side chain of an alanine (cyclopentyl), alanine (cyclohexyl), alanine (cyclobutyl), alanine (cyclopropyl), alanine (bromophenyl), alanine (thienyl), alanine (benzoylphenyl), alanine (anthryl), alanine (styryl), alanine~~-(alanine-(styryl)~~, alanine (pyridyl), alanine (benzothienyl), alanine(naphtyl), biphenylalanine, diphenylalanine, glycine (4-Hydroxyphenyl), alanine (homotyrosine), alanine (furyl), phenylalanine (4-amino), phenylalanine (4-nitro), phenylalanine (4-methyl), phenylalanine (2, 3, 4, 5, 6 pentafluoro), tyrosine, tyrosine (O-acetyl), tryptophan, lysine, *m*-tyrosine, tyrosine (O-methyl), phenylalanine, phenylalanine (4-fluoro), phenylalanine (4-iodo), phenylalanine (4-tert-butyl), phenylalanine (4-CF_3), phenylalanine (3-chloro), phenylalanine (4-chloro), phenylalanine (3-bromo), phenylalanine (4-bromo), phenylalanine (3-iodo) or phenylalanine (4-cyano); and R_{11} is H or -CH_3; and R_9 is as defined in (vi); or

(b) R_{11} is H, -(C1-C5)alkyl~~-(CH_2)q-(C3-C8)alkyl~~, –(CH_2)q-(C3-C8)heteroaryl, a –(CH_2)q-(C3-C8)aryl, a –(CH_2)q-(C3-C8)cycloalkyl, or a –(CH_2)q-(C3-C8)heterocycloalkyl, wherein q is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the alkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, hydroxy, amino, trifluoromethyl, cyano, nitro, or a (C1-C6)alkyl; or the side chain of a alanine (cyclopentyl), alanine (cyclohexyl), alanine (cyclobutyl), alanine (cyclopropyl), alanine (bromophenyl), alanine (thienyl), alanine (benzoylphenyl), alanine (anthryl), alanine (styryl), alanine~~-(alanine-(styryl)~~, alanine (pyridyl), alanine (benzothienyl), alanine(naphtyl), biphenylalanine, diphenylalanine, glycine (4-Hydroxyphenyl), alanine (homotyrosine), alanine (furyl), phenylalanine (4-amino), phenylalanine (4-nitro), phenylalanine (4-methyl), phenylalanine (2, 3, 4, 5, 6 pentafluoro), tyrosine, tyrosine (O-acetyl), tryptophan, lysine, *m*-tyrosine, tyrosine (O-methyl), phenylalanine, phenylalanine (4-fluoro),

phenylalanine (4-iodo), phenylalanine (4-tert-butyl), –phenylalanine (4-CF_3), alanine (naphtyl), phenylalanine (3-chloro), phenylalanine (4-chloro), phenylalanine (3-bromo), phenylalanine (4-bromo), –phenylalanine (3-iodo) or phenylalanine (4-cyano); and R_{10} is H or -CH_3; and R_9 is as defined in (vi); or

(c) R_9 forms a ring or a ring system with R_{10} or R_{11} forms a ring with R_9, wherein the ring or ring system is a (C3-C8)cycloalkyl, a (C3-C8)heterocycloalkyl or an (C3-C8)heteroaryl, optionally fused to an additional (C3-C8)cycloalkyl, a (C3-C8)heterocycloalkyl, a (C3-C8)aryl or an (C3-C8)heteroaryl, wherein when R_9 forms the ring or ring system with R_{10}, R_{11} is H; and when R_9 forms the ring or ring system with R_{11}, R_{10} is H; and wherein the definition of R9 in (vi) does not apply;

(v) R_{13} is H or -CH_3; and R_{14} is H, -(C1-C5)alkyl-$(CH_2)q'$-(C3-C8)alkyl, –$(CH_2)q'$-(C3-C8)heteroaryl, a –$(CH_2)q'$-(C3-C8)aryl, –$(CH_2)q'$-(C3-C8)cycloalkyl, or a –$(CH_2)q'$-(C3-C8)heterocycloalkyl, wherein q' is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the alkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, hydroxy, alkoxy, or a (C1-C6)alkyl; or the side chain of a leucine, tert-leucine, norleucine, norvaline, valine, neopentylglycine, cyclohexylglycine, cyclohexylalanine, phenylalanine, tyrosine (O-methyl), 2, 4, 5-trifluoro phenylalanine, homocyclohexylalanine, cyclopropylalanine, cyclobutylalanine, cyclopentylalanine, cycloheptylalanine or glycine; or

R_{14} is H or -CH_3; and R_{13} is H, -(C1-C5)alkyl-$(CH_2)q'$-(C3-C8)alkyl, –$(CH_2)q'$-(C3-C8)heteroaryl, or a –$(CH_2)q'$-(C3-C8)aryl, –$(CH_2)q'$-(C3-C8)cycloalkyl, or a –$(CH_2)q'$-(C3-C8)heterocycloalkyl, wherein q' is 1 to 5, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the alkyl, heteroaryl, aryl, cycloalkyl and heterocycloalkyl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, hydroxy, alkoxy, or a (C1-C6)alkyl; or the side chain of a leucine, tert-leucine, norleucine, norvaline, valine, neopentylglycine, cyclohexylglycine, cyclohexylalanine, phenylalanine, tyrosine (O-methyl), 2, 4, 5, -trifluoro phenylalanine, homocyclohexylalanine, cyclopropylalanine, cyclobutylalanine, cyclopentylalanine, cycloheptylalanine or glycine;

(vi) (A) R_2, R_5, R_8, R_9, and R_{12} are each independently H, (C1-12)alkyl, or (C4-C14)aralkyl; or

(B) at least one of R_2, R_5, R_8, R_9, and R_{12} is as follows:

a) R_2 is an -$(CH_2)p$-(C3-C8)heteroaryl or a -$(CH_2)p$-(C3-C8)aryl, wherein p is 1 to 5; or the side chain of a lysine, ornithine, diaminobutyric acid (Dab), diaminopropionic acid (Dap), histidine, norleucine, norvaline, glycine or glutamate, with the proviso that R_3 and R_4 are then H;

b) R_5 is a -$(CH_2)p'$-(C3-C8)heteroaryl or a -$(CH_2)p'$-(C3-C8)aryl, wherein p' is 1 to 5; or the side chain of a lysine, ornithine, diaminobutyric acid (Dab), diaminopropionic acid (Dap), histidine, norleucine, norvaline, glycine or glutamate, with the proviso that R_6 and R_7 are then H;

c) R_9 is $-(CH_2)q$-(C3-C8)heteroaryl or a $-(CH_2)q$-(C3-C8)aryl, wherein q is 1 to 5; or the side chain of an alanine (cyclopentyl), alanine (furyl), phenylalanine (4-amino), phenylalanine (4-nitro), phenylalanine (4-methyl), phenylalanine (2, 3, 4, 5, 6 pentafluoro), tyrosine, tyrosine (OAc), tryptophan, lysine, *m* tyrosine, tyrosine (Ome), phenylalanine, phenylalanine (4-fluoro), phenylalanine (4-iodo), phenylalanine (4-tert-butyl), phenylalanine (4-CF_3), alanine (naphtyl), phenylalanine (3-chloro), phenylalanine (4-chloro), phenylalanine (3-bromo), phenylalanine (4-bromo), phenylalanine (3-iodo) or phenylalanine (4-cyano), with the proviso that R_{10} and R_{11} are then H;

d) R_{12} is $-(CH_2)q'$-(C3-C8)heteroaryl or a $-(CH_2)q'$-(C3-C8)aryl, wherein q' is 1 to 5; or the side chain of a leucine, tert-leucine, norleucine, norvaline, valine, neopentylglycine, cyclohexylglycine, cyclohexylalanine, phenylalanine, tyrosine (Ome), 2, 4, 5, trifluoro phenylalanine, homo cyclohexyl alanine, cyclopropyl alanine cyclobutyl alanine, cyclopentyl alanine or cycloheptyl alanine, with the proviso that R_{13} and R_{14} are then H;

and the other ones of R_2, R_5, R_8, R_9, and R_{12} are each independently H, (C1-12)alkyl, or (C4-C14)aralkyl, with the proviso that when (iv)(c), the definition of R_9 herein does not apply;

(vii) R_{15} is H, or -OR_{18} OH wherein R_{18} is H, benzyl, (C4-C14)aralkyl or (C1-12)allyl;

(viii) R_{16} is H, or $-CH_3$; and

(ix) (a) X is $-(CH_2)n$, wherein n is 0-4; and Y is $-(CH_2)m-$, $-CH=CH(CH_2)m-$, $-C(R_{22})(R_{23})-S-S-C(R_{24})(R_{25})-$ wherein R_{22}, R_{23}, R_{24}, and R_{25} are independently H or (C1-C4)alkyl, $-NR_{19}C(=O)(CH_2)m-$ or $-C(=O)NR_{19}(CH_2)m-$, wherein m is 1-4, wherein R_{19} is H or (C1-C5)alkyl; or

(b) X and Y form together $-(CH_2)n$-aryl-$(CH_2)m-$, wherein n and m are as defined above, wherein aryl is ortho, meta, or para benzene, or biaryl, substituted or not in at least one of positions 2, 3, 4, 2', 3', or 4',

wherein at least one of R_3, R_4, R_6 and R_7 is -(C1-C5)aminoalkyl, or is the side chain of citrulline,

or a stereoisomer or a mixture thereof, or a pharmaceutically acceptable salt, ester or solvate thereof.

2. The compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of claim 1, wherein:

(iv) R_{10} is a leucine or substituted or unsubstituted $-(CH_2)q$-(C3-C8)aryl or $-(CH_2)q$-(C3-C8)heteroaryl, wherein the aryl or heteroaryl is optionally fused with one or two (C3-C8)aryl, and wherein the aryl or heteroaryl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, hydroxy, amino, trifluoromethyl, cyano, nitro, or a (C1-C6)alkyl;, and R_{11} is H or $-CH_3$; or R_{10} or R_{11} forms a ring with R_9, wherein the ring is a (C3-C8)heterocycloalkyl fused with another (C3-C8)cycloalkyl or a (C3-C8)aryl, wherein when R_{10} forms the ring with R_9, R_{11} is H; and when R_{11} forms the ring with R_9, R_{10} is H; and

(v) R_{13} is H, or -(C1-C5)alkyl-~~CH_3~~; and R_{14} is H, a substituted or unsubstituted $–(CH_2)q'$-(C3-C8)cycloalkyl, -(C1-C5)alkyl-~~$(CH_2)q'$-(C3-C8)alkyl~~, $–(CH_2)q'$-(C3-C8)heterocycloalkyl, or $–(CH_2)q'$-(C3-C8)aryl, wherein q' is 1 to 5, and wherein the aryl is optionally substituted with one or more substituents, wherein each substituent is independently an halogen, hydroxy, or alkoxy.

3. The compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of claim 1 or 2, wherein:

(a) R_2 is H or CH_3;

(b) R_5 is H or CH_3;

(c) R_8 is H;

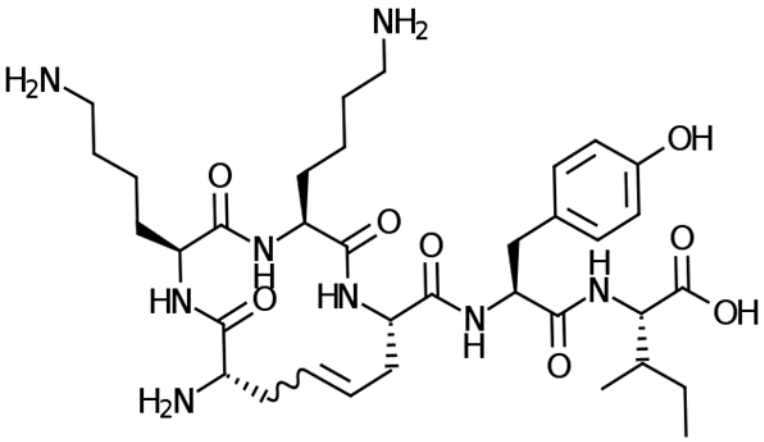
(d) R_5 is H;

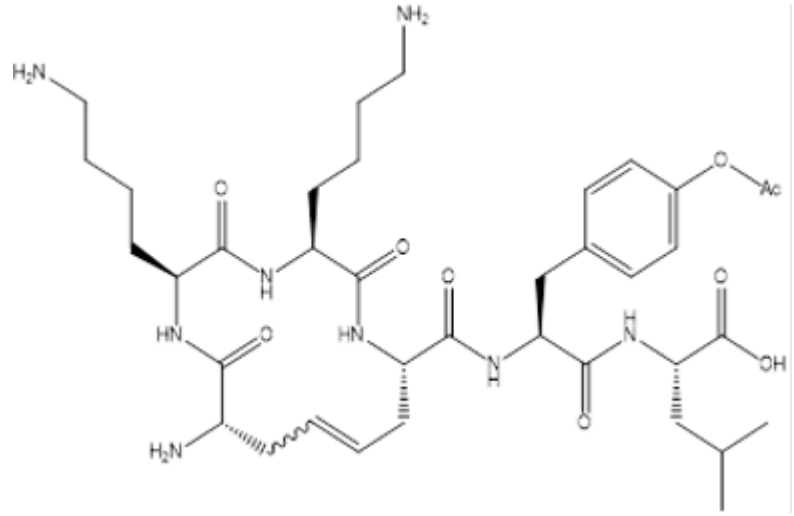
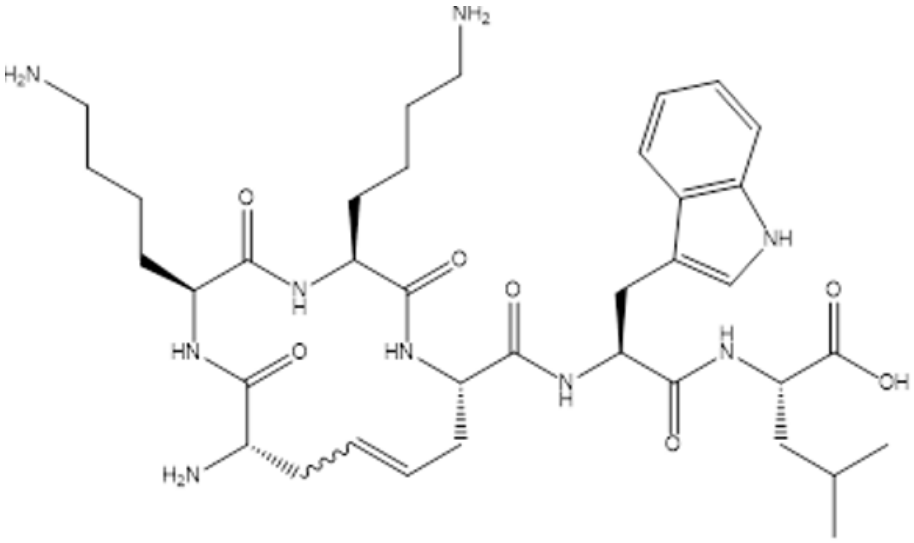
(e) R_{12} is H, CH_3 or N-isobutyl;

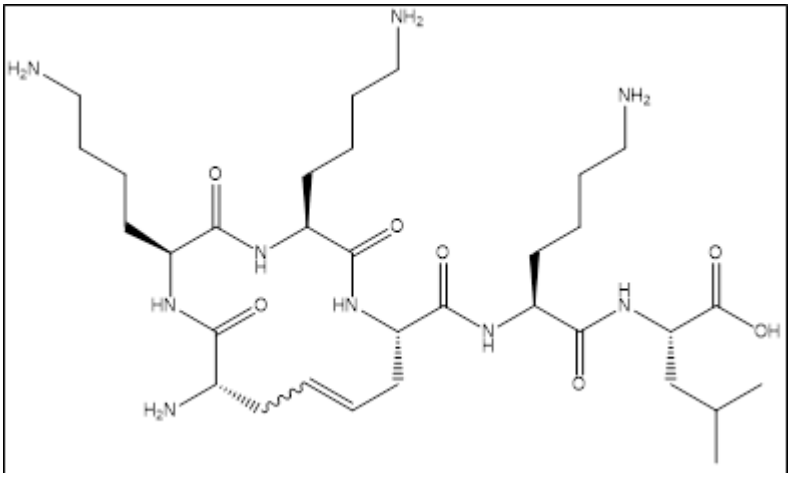
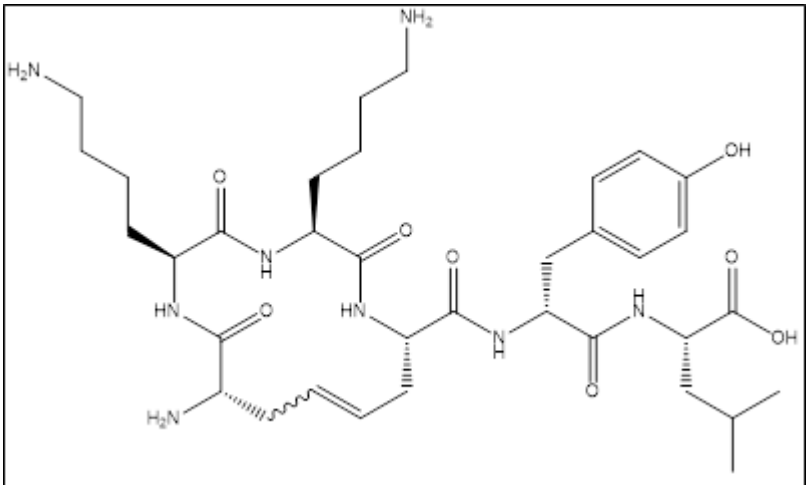
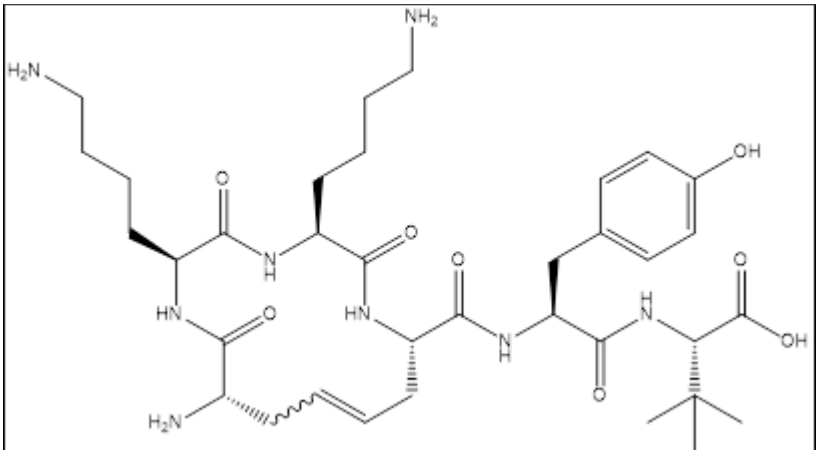
(f) R_{16} is H or CH_3; or

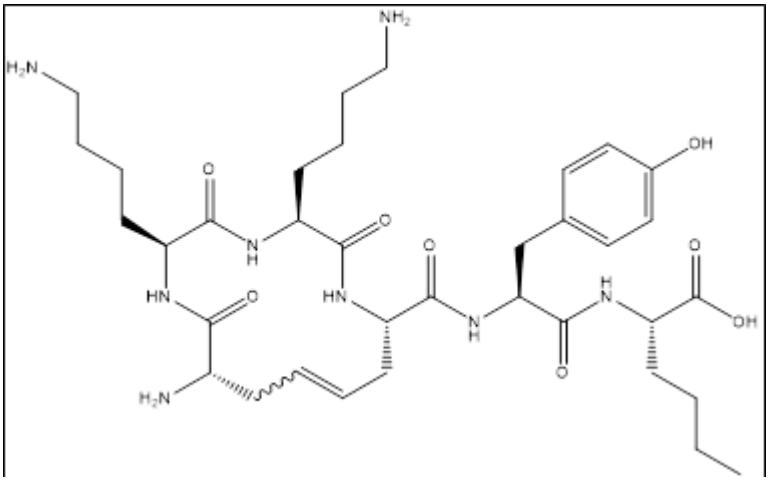
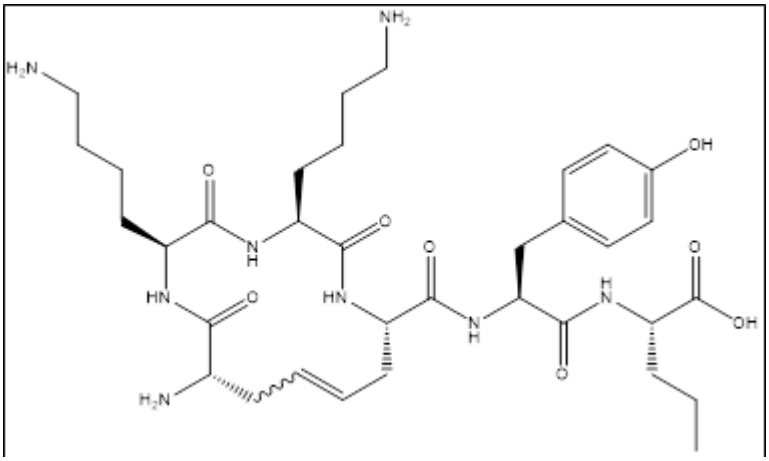
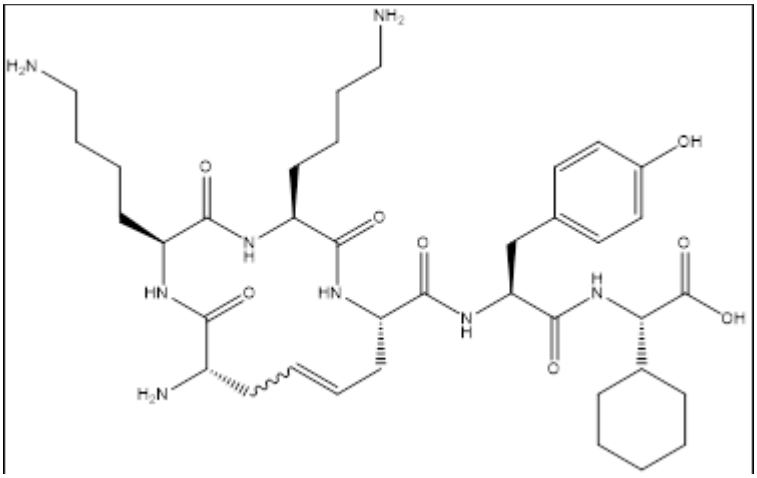
(g) any combination of at least two of (a) to (f).

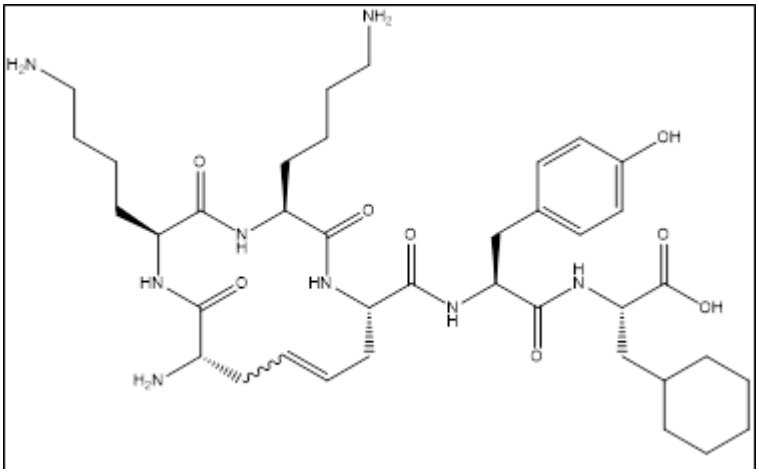
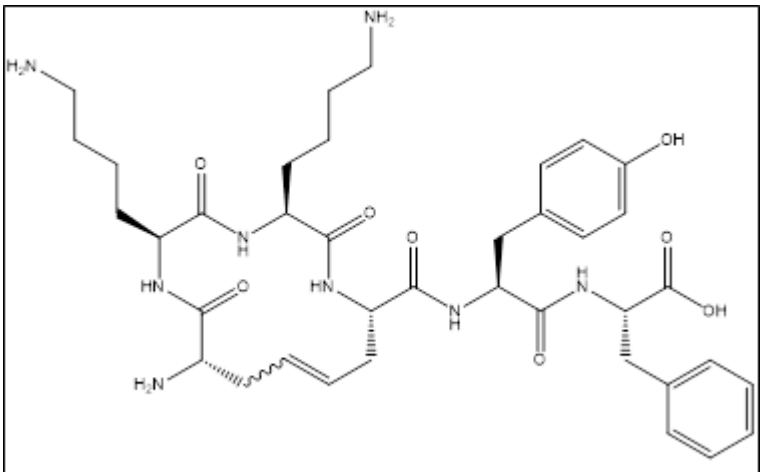
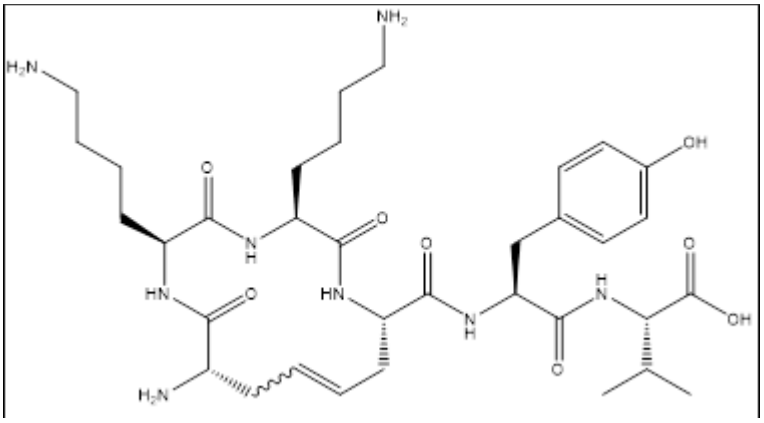
~~3.~~4. The compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of claim 1, wherein the compound is:

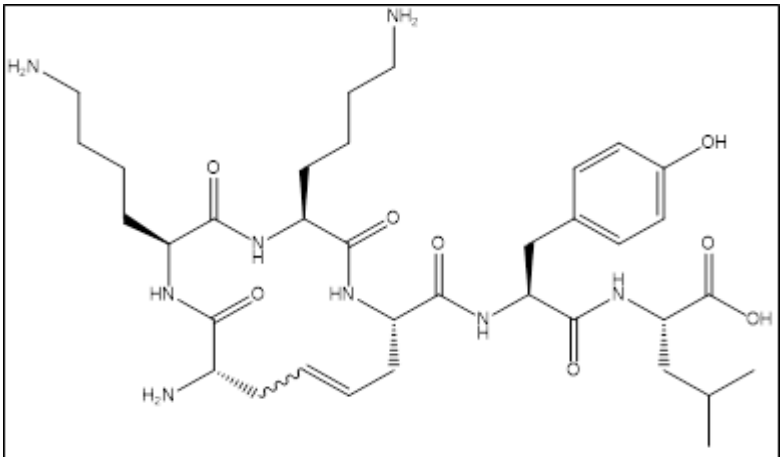
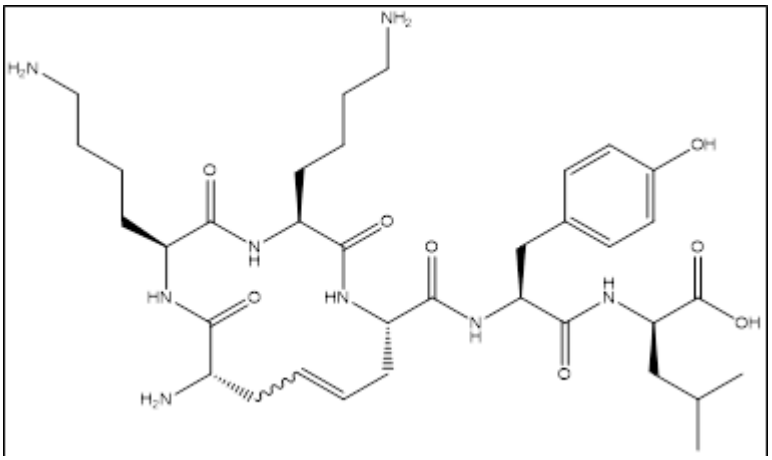
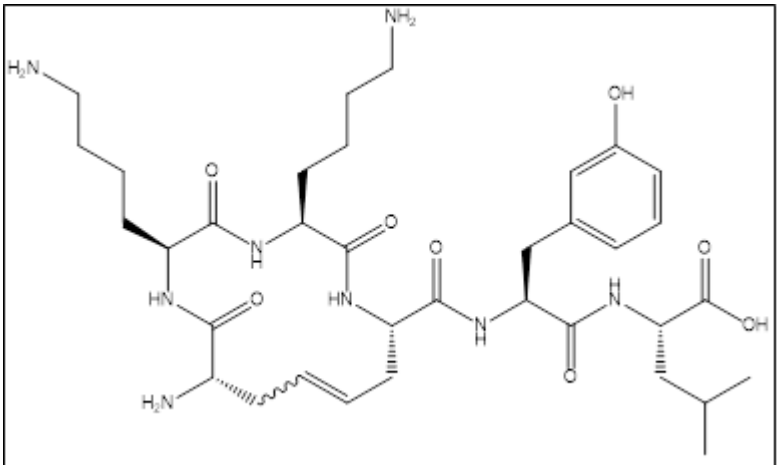
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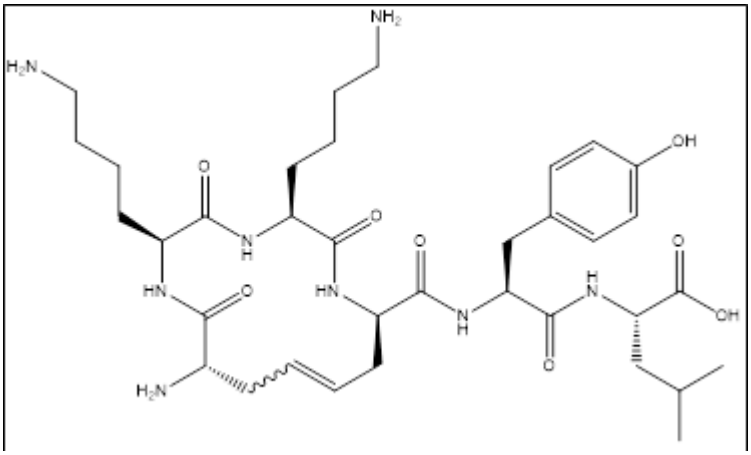
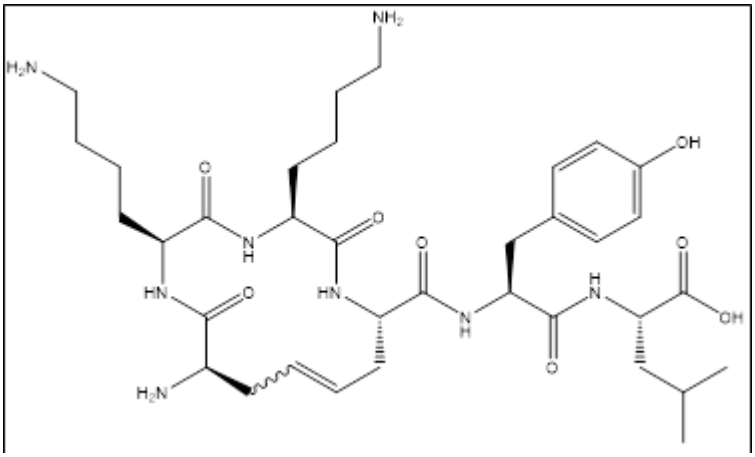
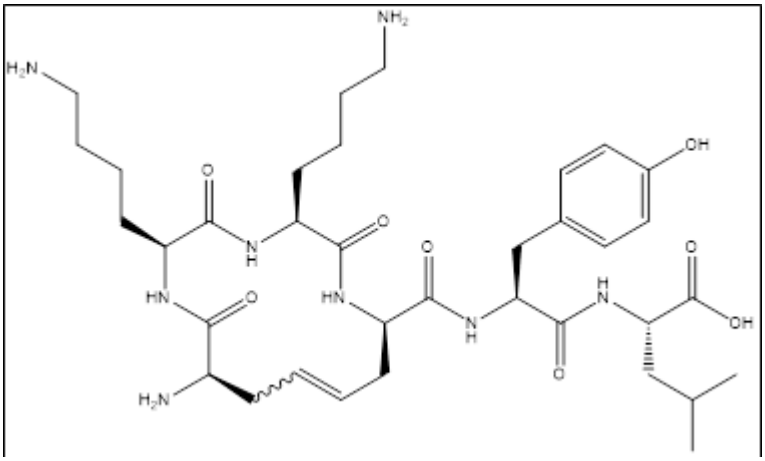
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16.	 Chemical Formula $C_{37}H_{57}N_9O_7$ Molecular Weight 739.92

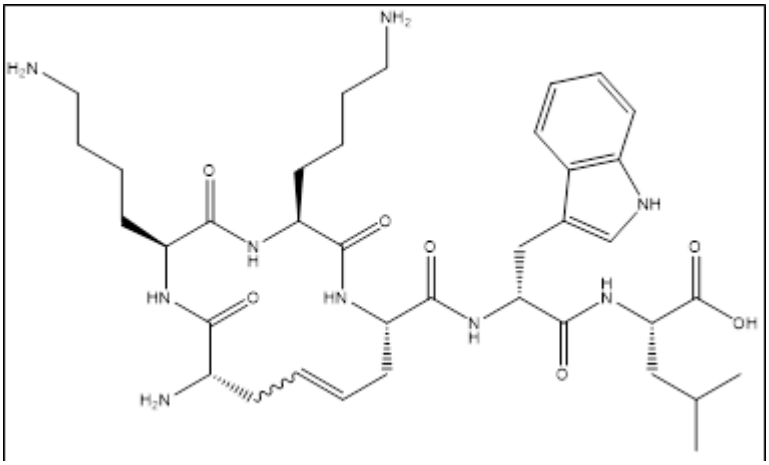
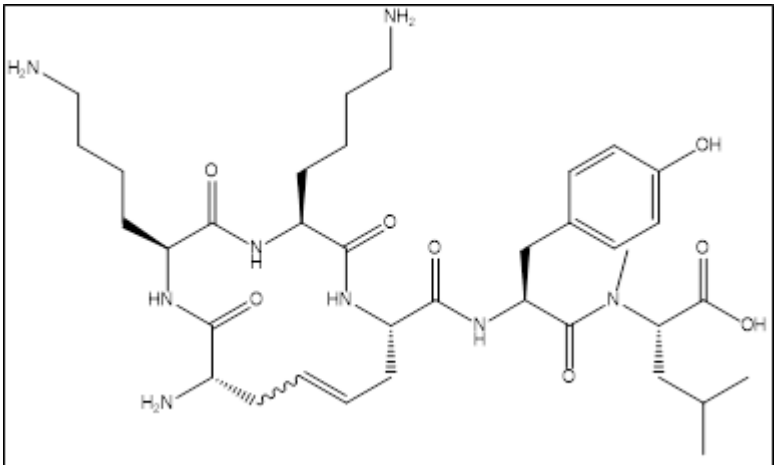
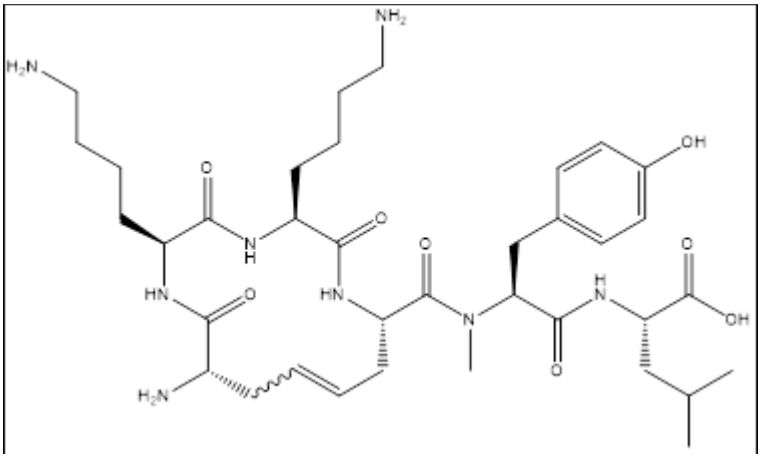
17.	 Chemical Formula $C_{32}H_{59}N_9O_7$ Molecular Weight 681.88
21.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88
27.	 Chemical Formula $C_{35}H_{56}N_8O_9$ Molecular Weight 716.88

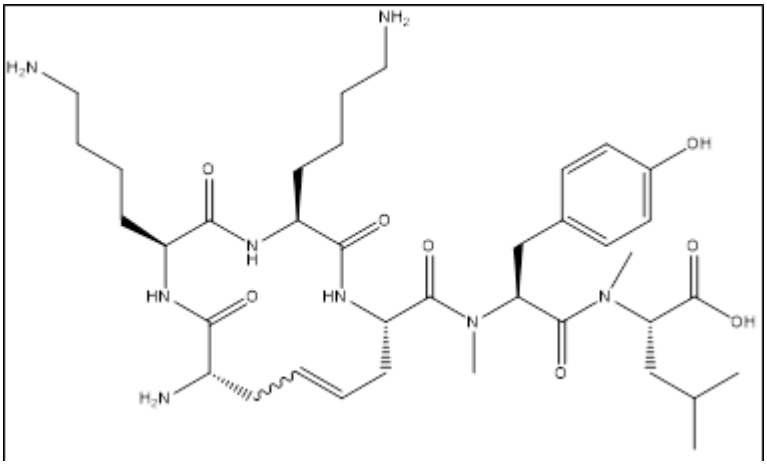
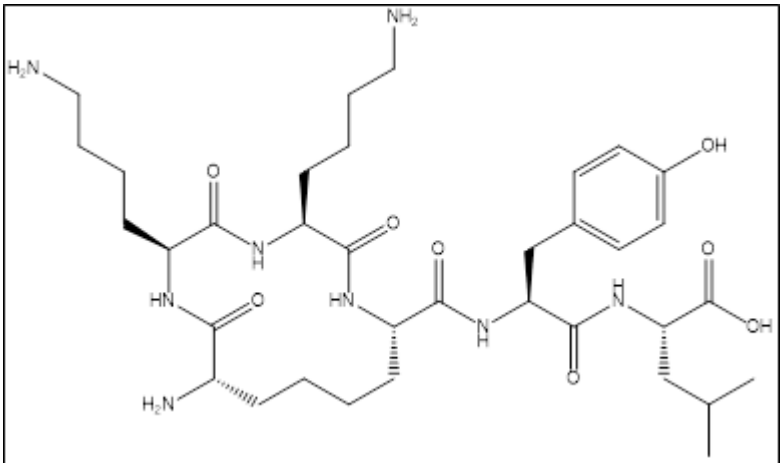
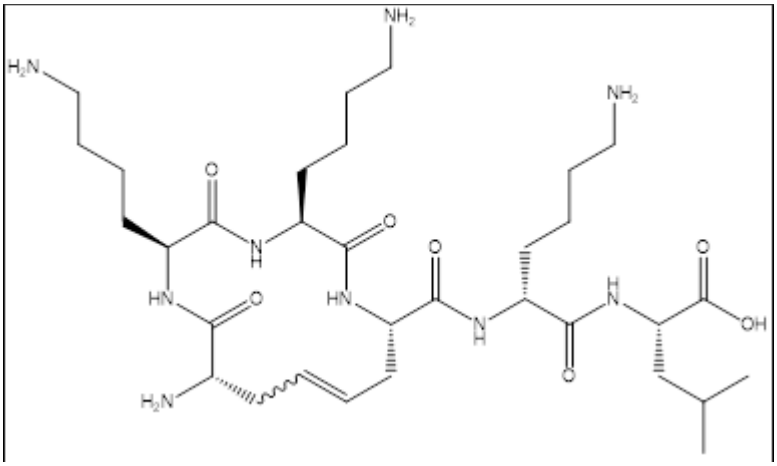
28.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88
29.	 Chemical Formula $C_{34}H_{54}N_8O_8$ Molecular Weight 702.85
30.	 Chemical Formula $C_{37}H_{58}N_8O_8$ Molecular Weight 742.92

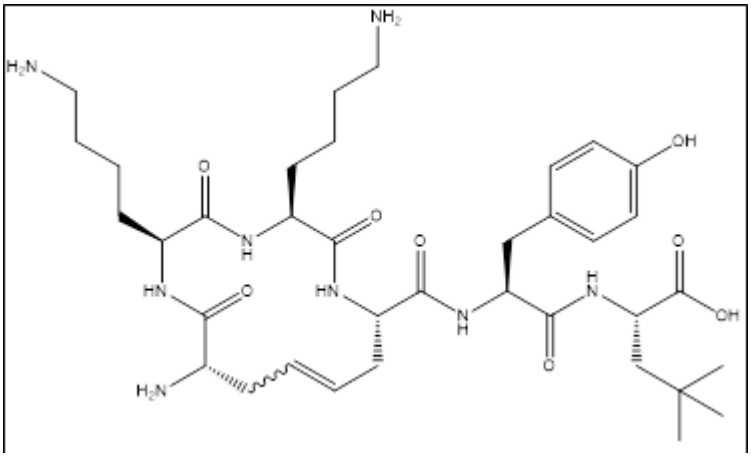
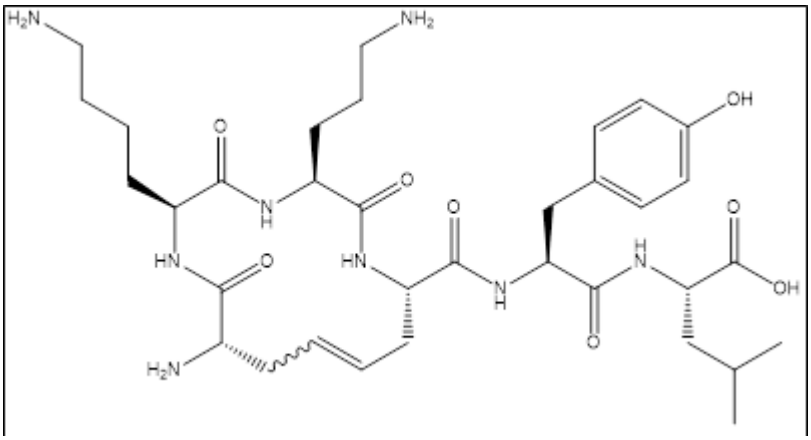
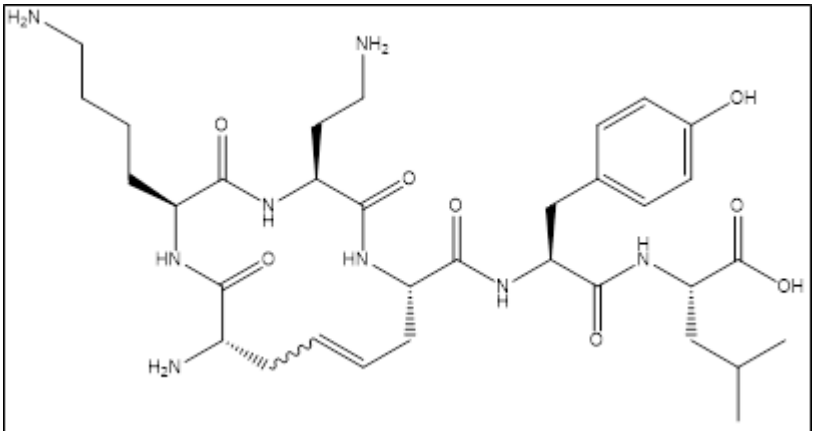
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32.	 Chemical Formula $C_{35}H_{54}N_8O_8$ Molecular Weight 750.90
33.	 Chemical Formula $C_{34}H_{54}N_8O_8$ Molecular Weight 702.85

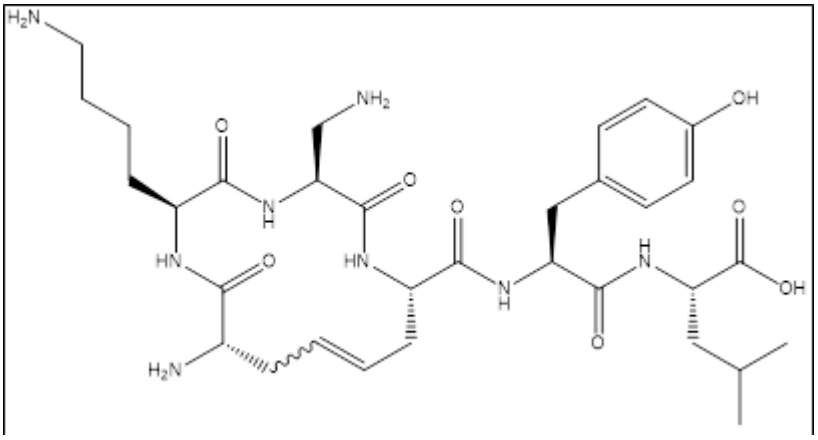
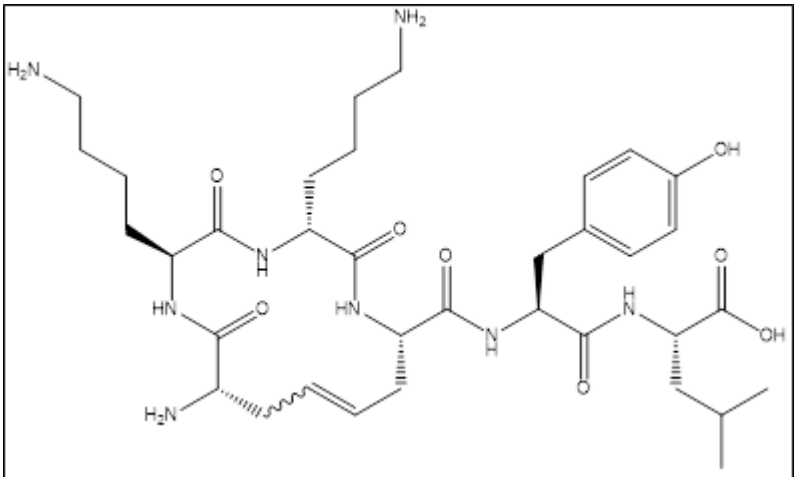
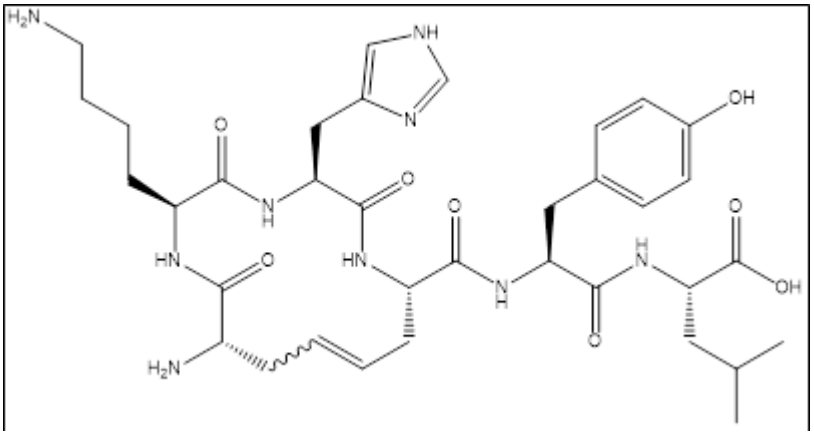
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39.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88

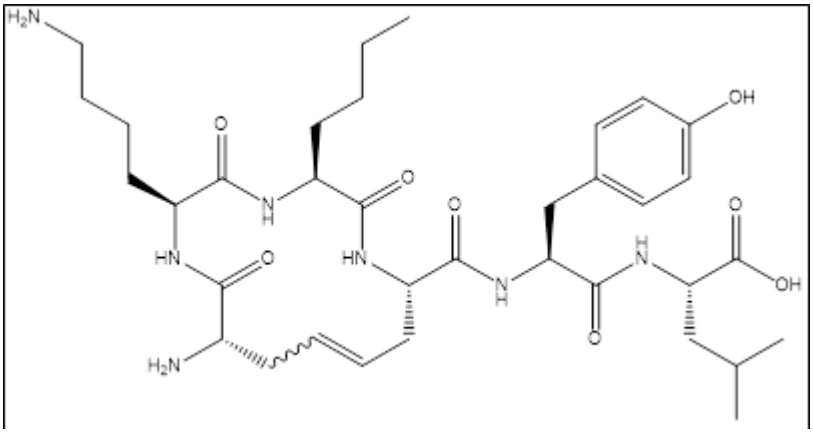
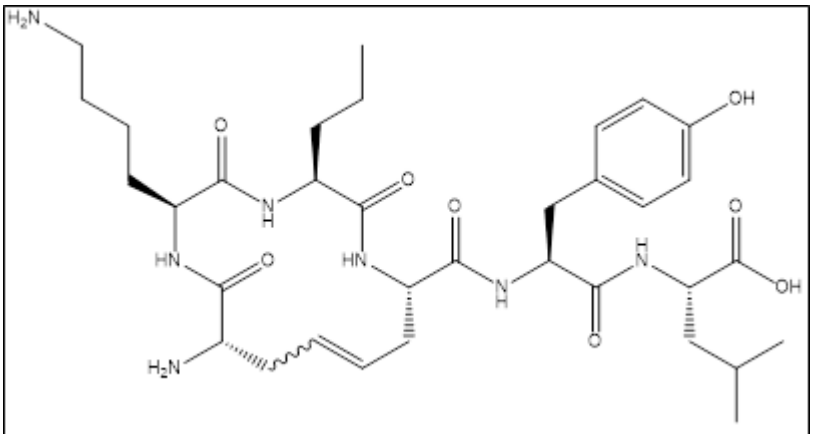
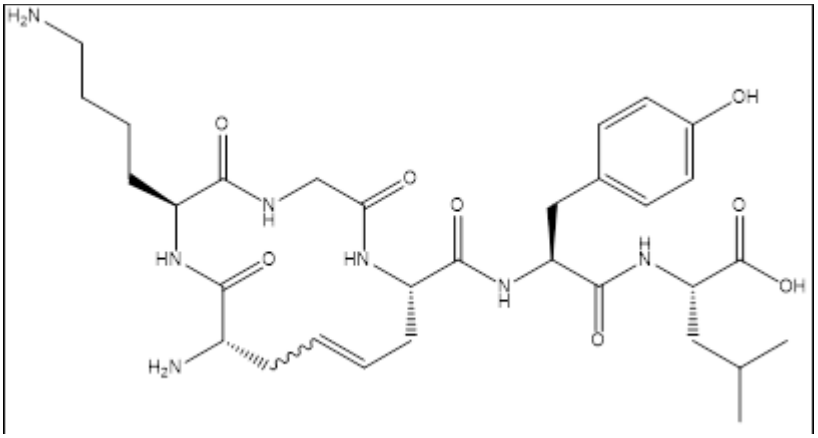
40.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88
41.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88
42.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88

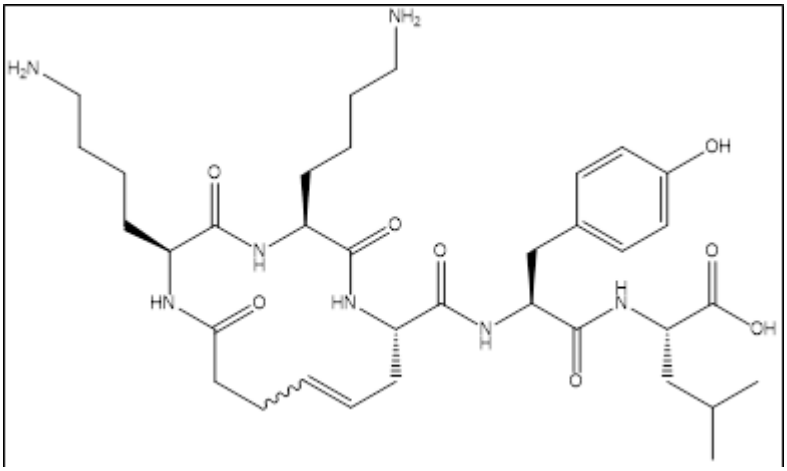
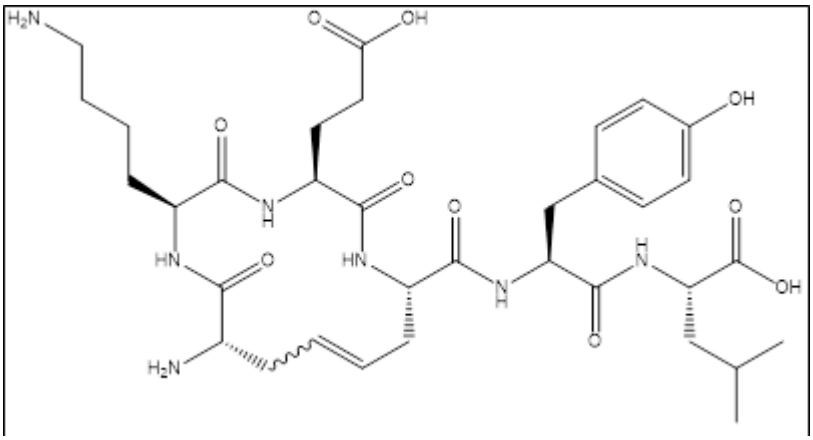
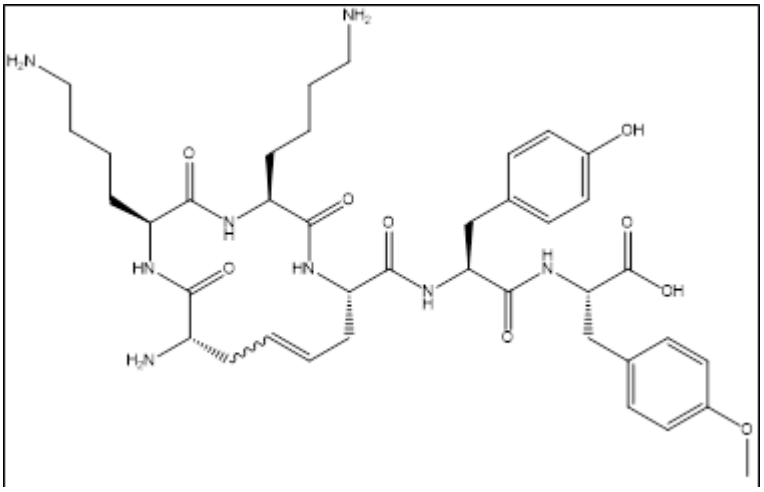
43.	 Chemical Formula $C_{37}H_{57}N_9O_7$ Molecular Weight 739.92
44.	 Chemical Formula $C_{36}H_{88}N_8O_8$ Molecular Weight 730.91
45.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91

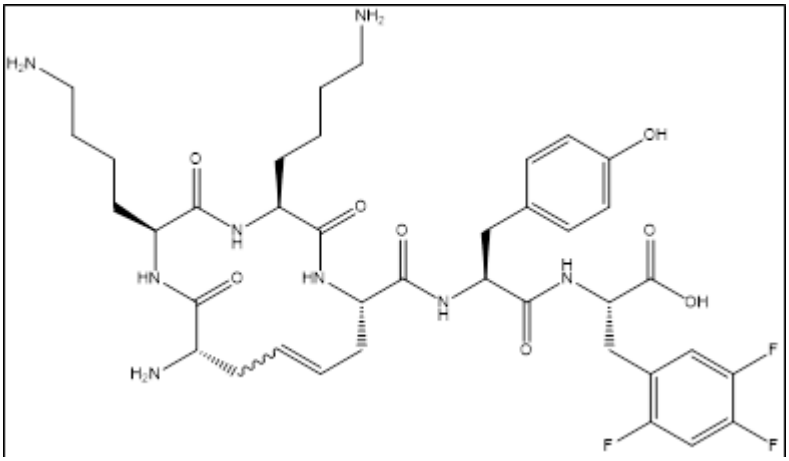
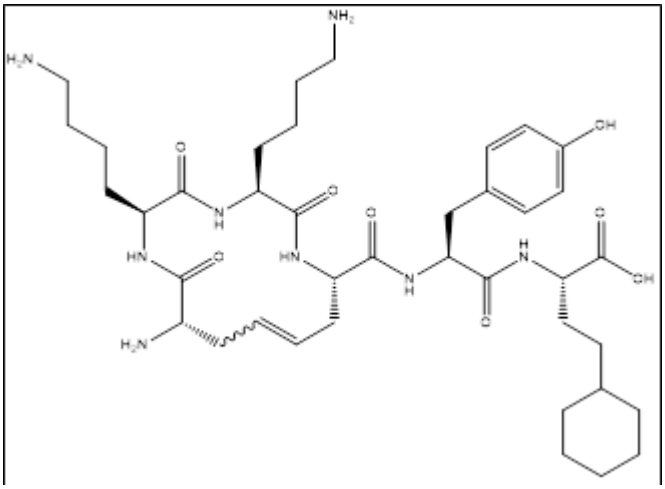
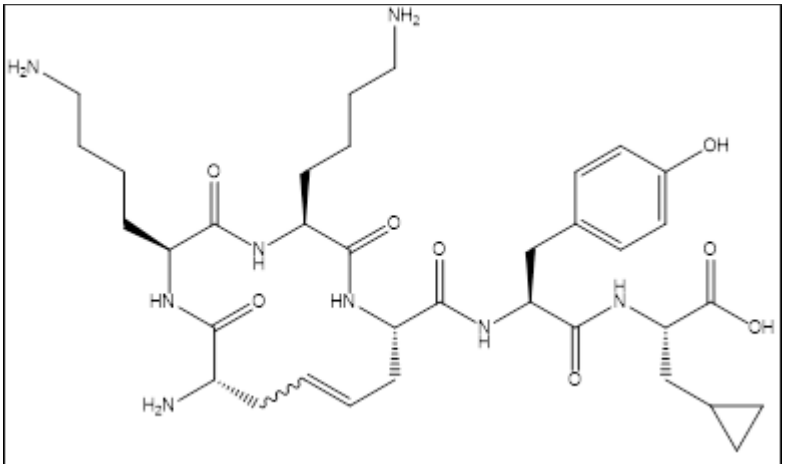
46.	 Chemical Formula $C_{37}H_{60}N_8O_8$ Molecular Weight 744.93
~~47.~~	 ~~Chemical Formula $C_{35}H_{58}N_8O_8$~~ ~~Molecular Weight 718.90~~
48.	 Chemical Formula $C_{32}H_{59}N_9O_7$ Molecular Weight 681.88

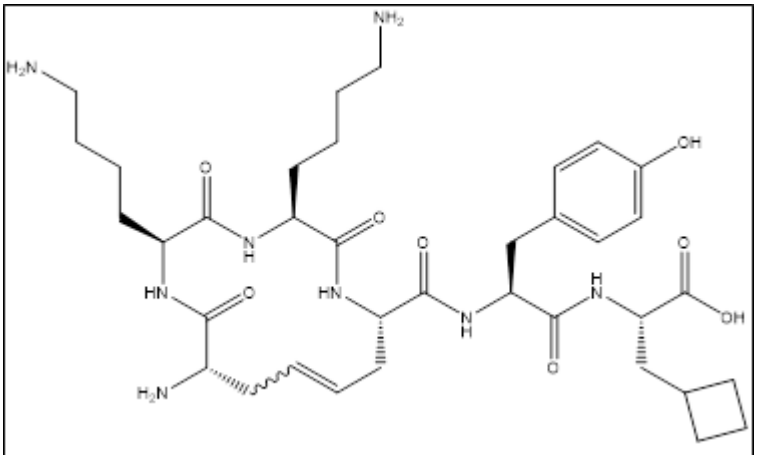
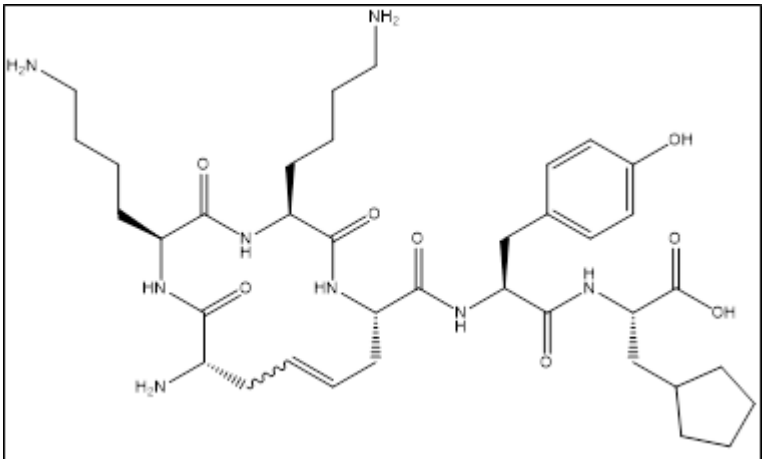
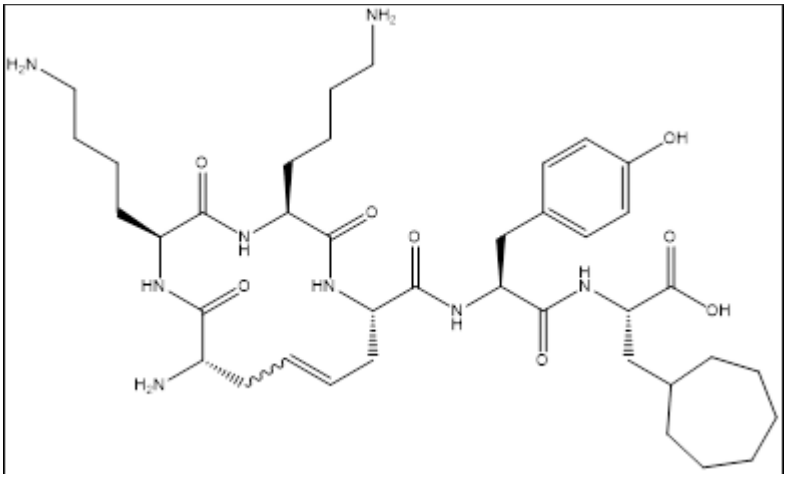
49.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91
51.	 Chemical Formula $C_{34}H_{54}N_8O_8$ Molecular Weight 702.85
52.	 Chemical Formula $C_{33}H_{52}N_8O_8$ Molecular Weight 688.83

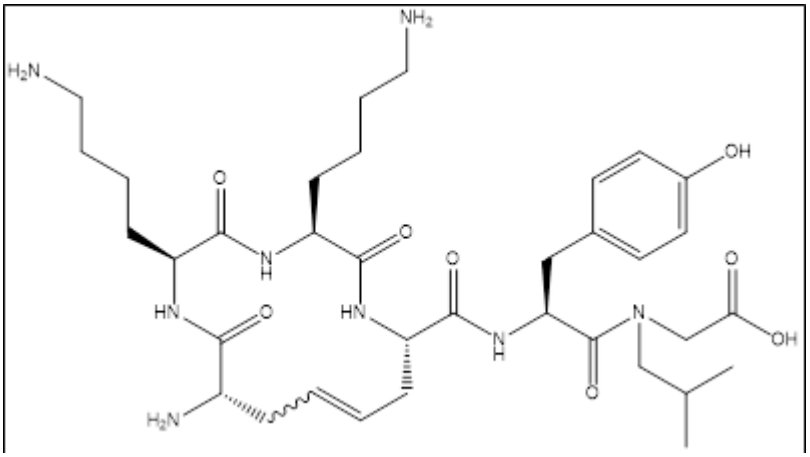
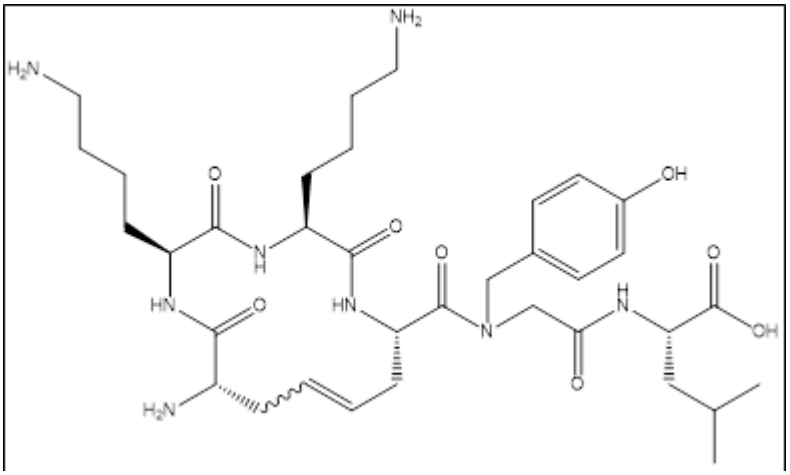
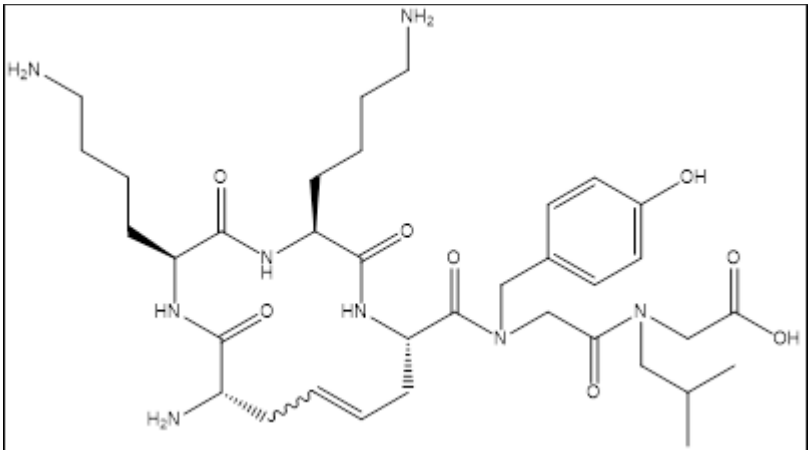
53.	 Chemical Formula $C_{32}H_{50}N_8O_8$ Molecular Weight 674.80
54.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88
55.	 Chemical Formula $C_{35}H_{51}N_9O_8$ Molecular Weight 725.85

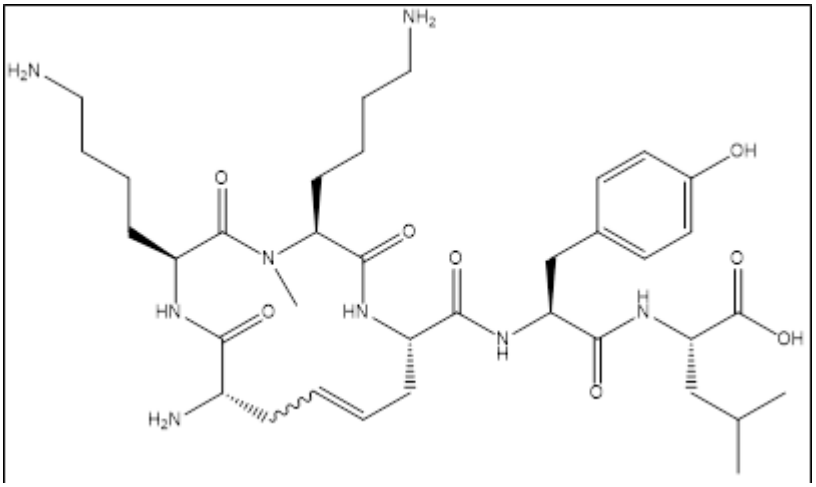
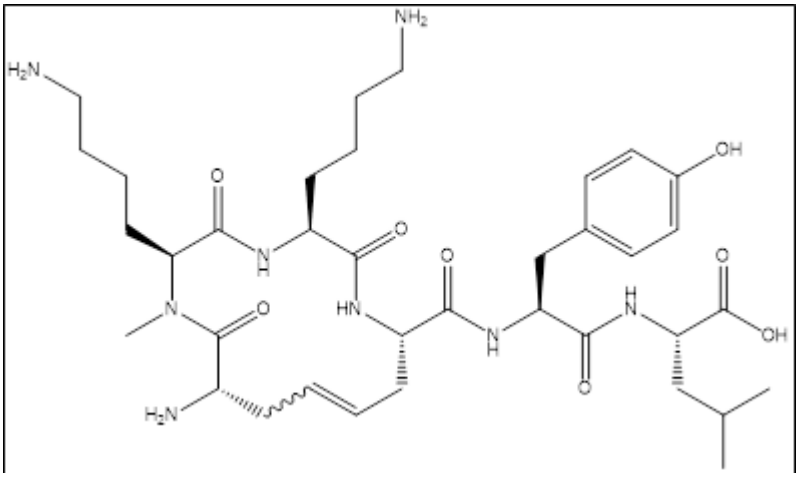
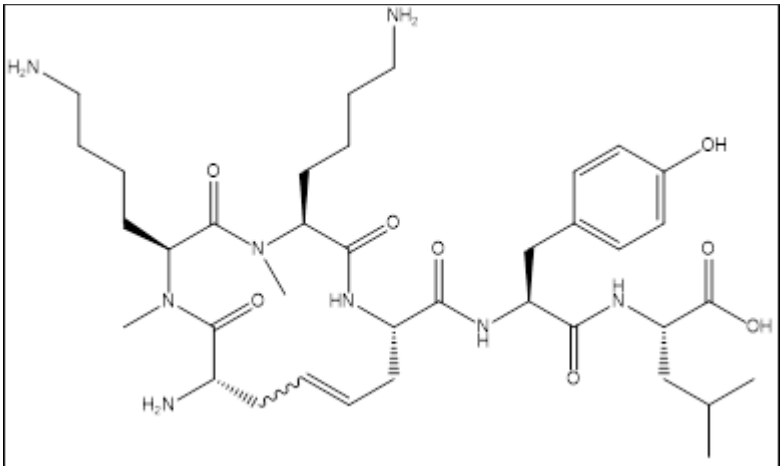
57.	 Chemical Formula $C_{35}H_{55}N_7O_8$ Molecular Weight 701.87
58.	 Chemical Formula $C_{34}H_{53}N_7O_8$ Molecular Weight 687.84
59.	 Chemical Formula $C_{31}H_{47}N_7O_8$ Molecular Weight 645.76

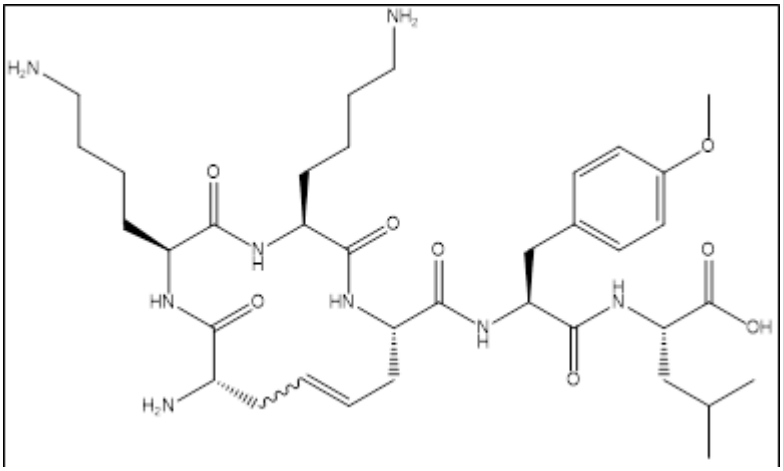
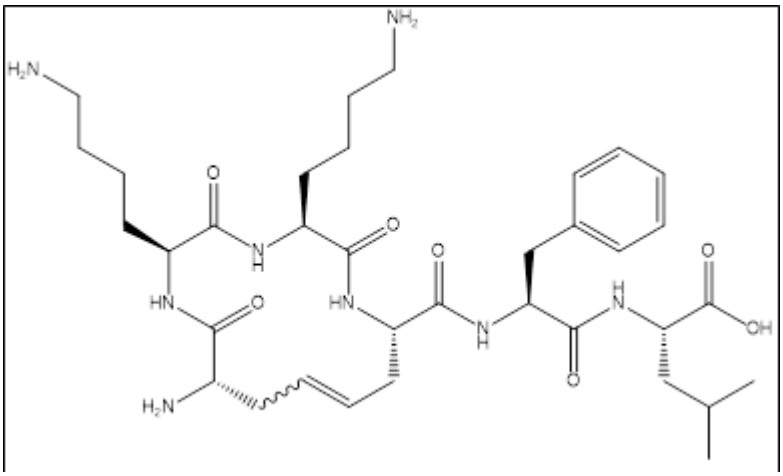
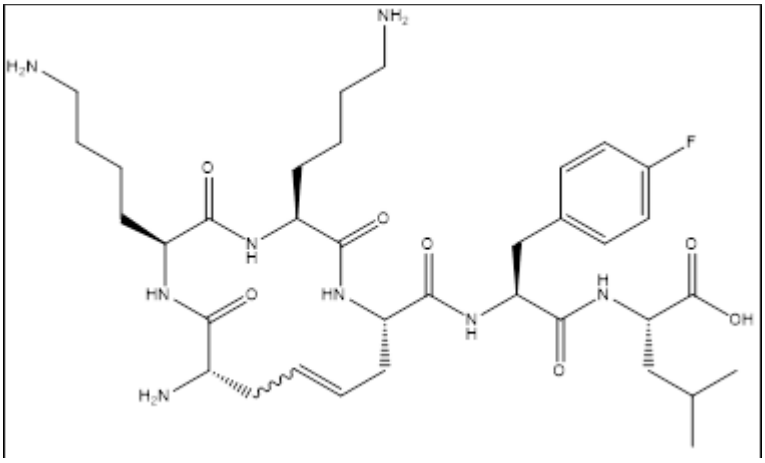
60.	 Chemical Formula $C_{35}H_{55}N_7O_8$ Molecular Weight 701.87
61.	 Chemical Formula $C_{34}H_{51}N_7O_{10}$ Molecular Weight 717.82
62.	 Chemical Formula $C_{39}H_{56}N_8O_9$ Molecular Weight 780.92

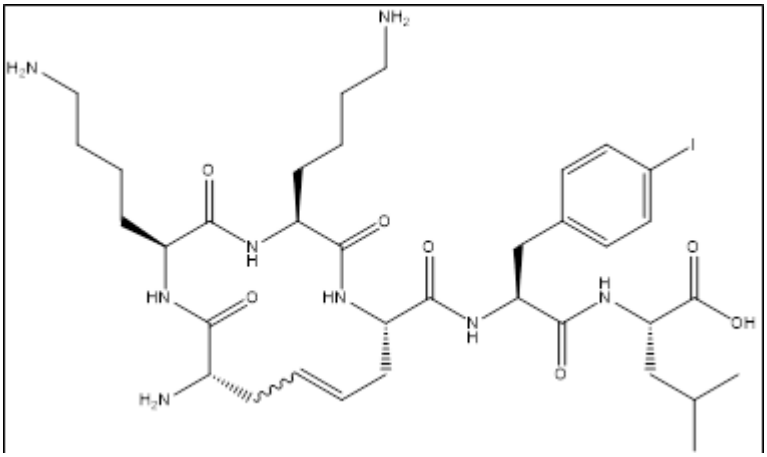
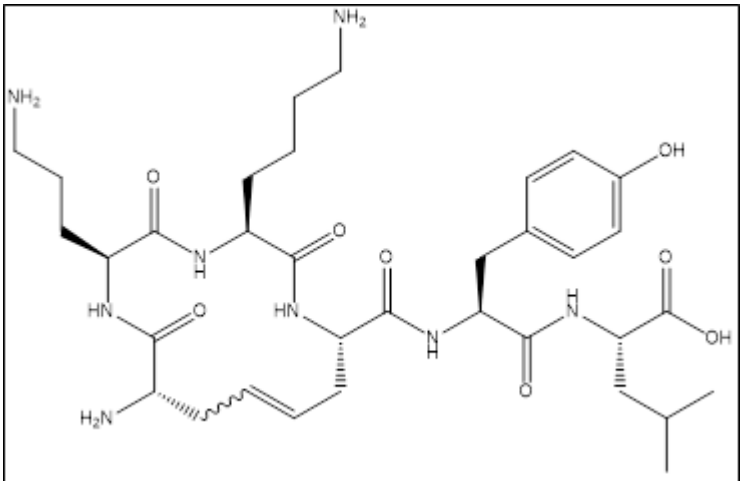
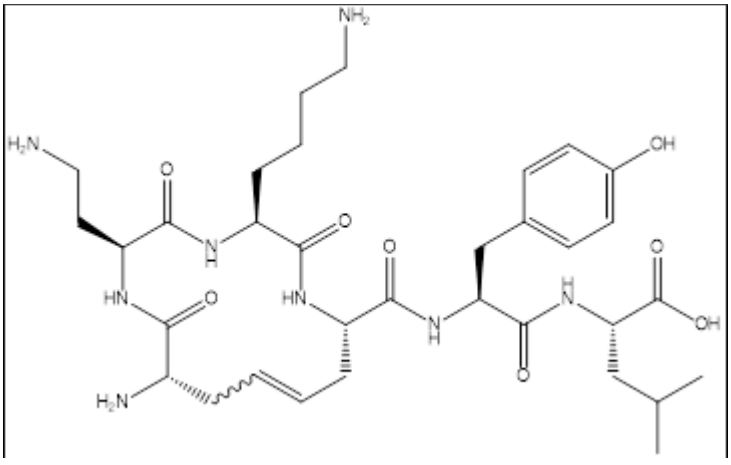
63.	 Chemical Formula $C_{38}H_{51}F_3N_8O_8$ Molecular Weight 804.87
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65.	 Chemical Formula $C_{35}H_{54}N_8O_8$ Molecular Weight 714.87

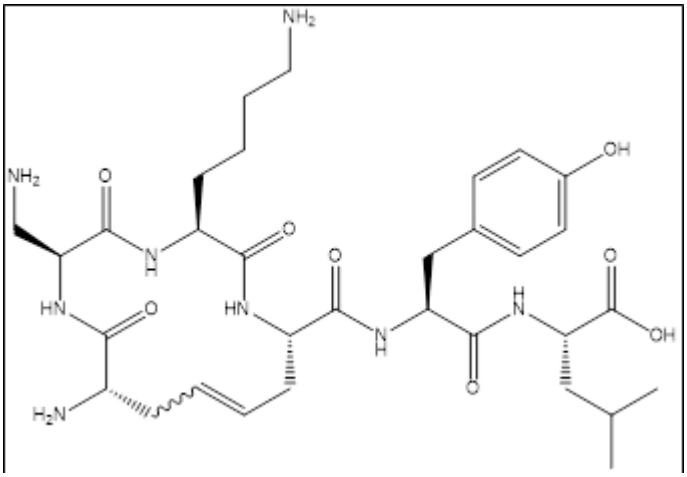
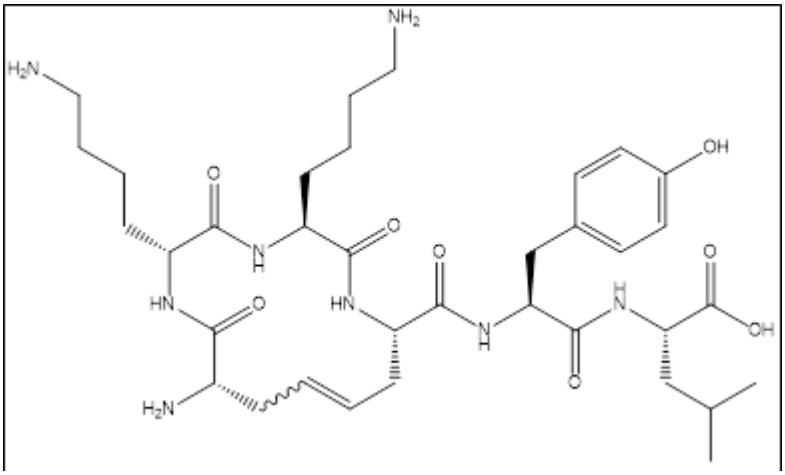
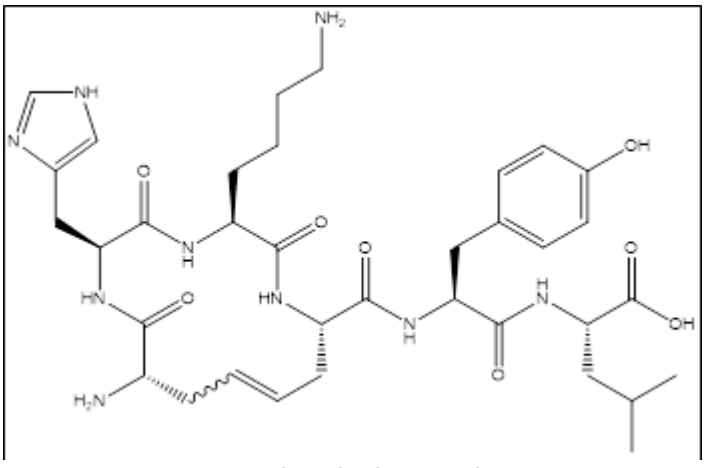
66.	 Chemical Formula $C_{36}H_{56}N_8O_8$ Molecular Weight 728.89
67.	 Chemical Formula $C_{37}H_{58}N_8O_8$ Molecular Weight 742.92
68.	 Chemical Formula $C_{39}H_{62}N_8O_8$ Molecular Weight 770.97

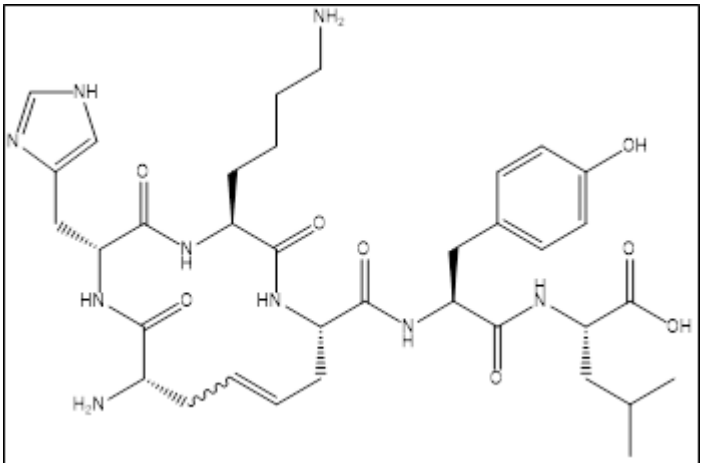
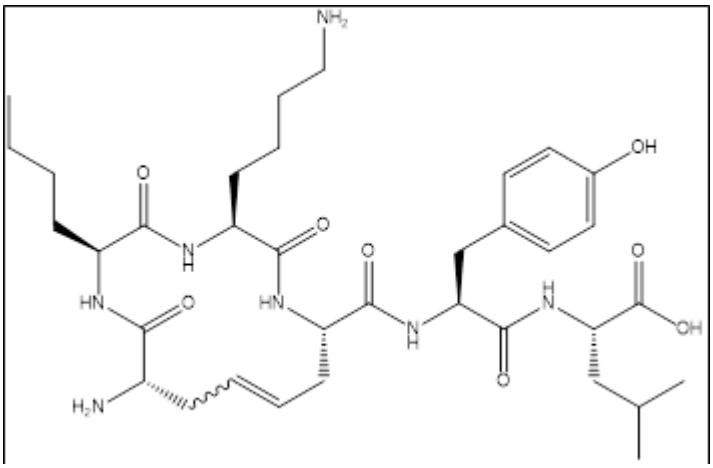
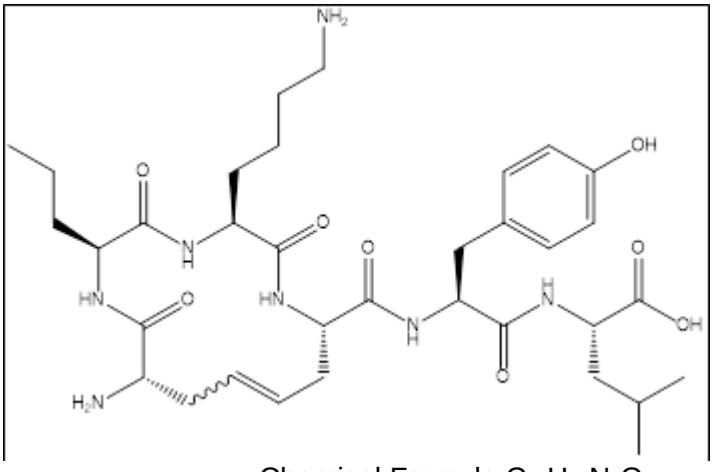
69.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88
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71.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88

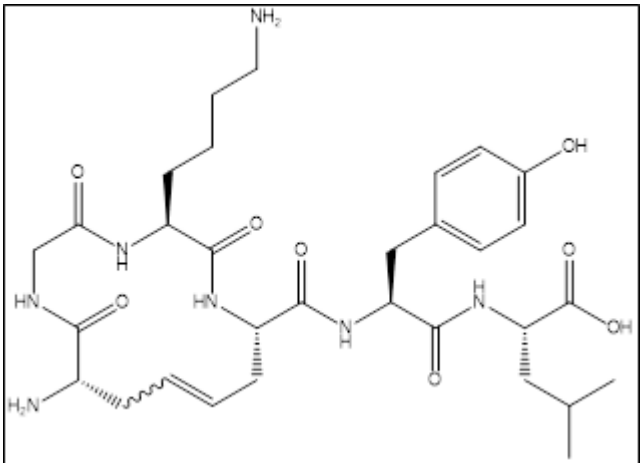
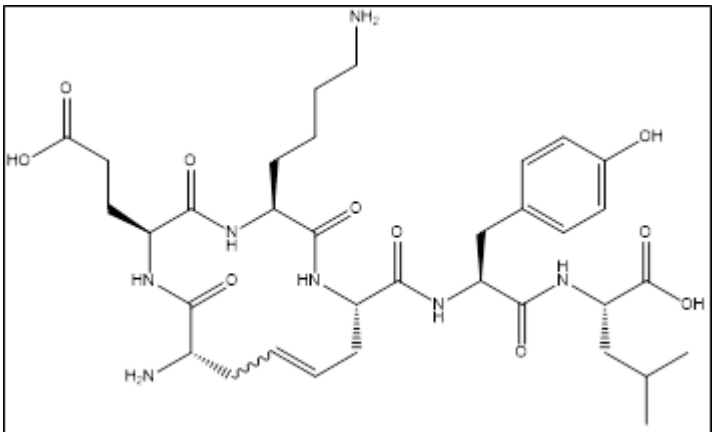
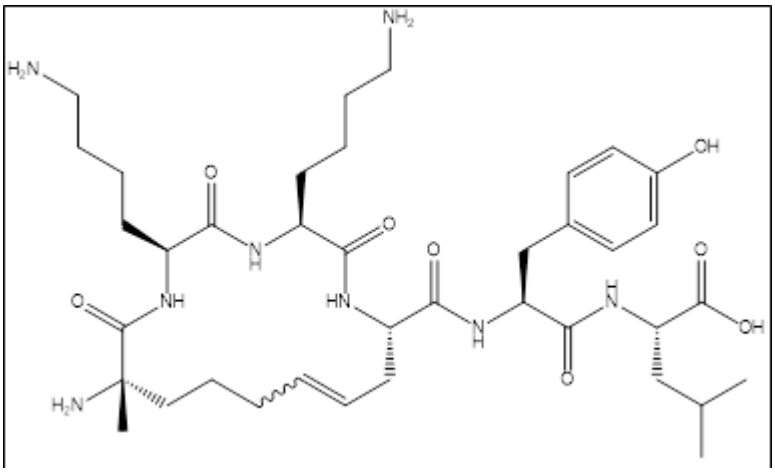
72.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91
73.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91
74.	 Chemical Formula $C_{37}H_{60}N_8O_8$ Molecular Weight 744.93

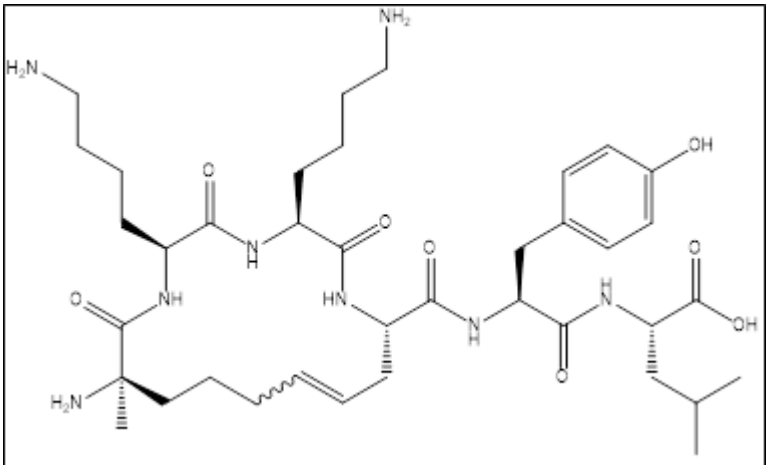
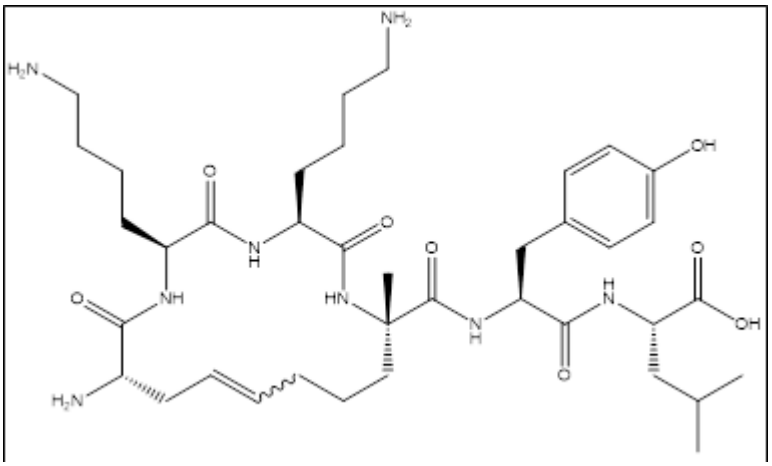
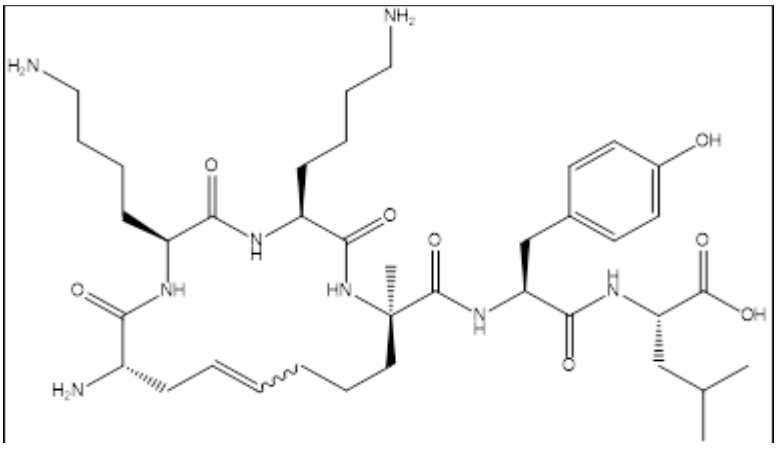
75.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91
76.	 Chemical Formula $C_{35}H_{56}N_8O_7$ Molecular Weight 700.88
77.	 Chemical Formula $C_{35}H_{55}FN_8O_7$ Molecular Weight 718.87

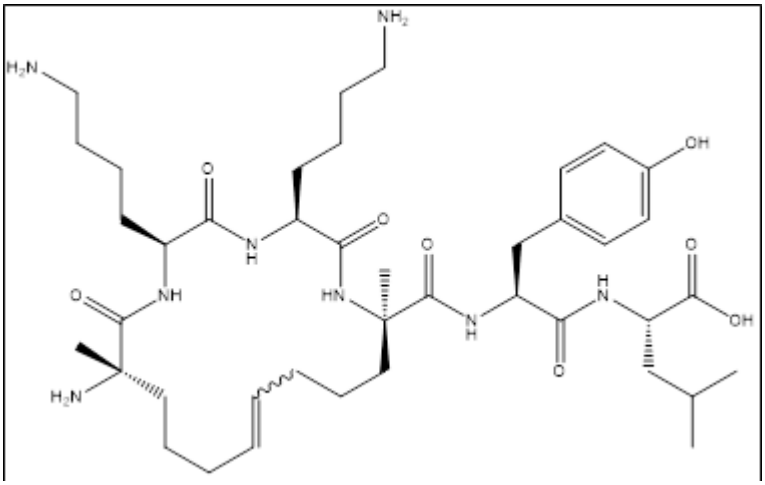
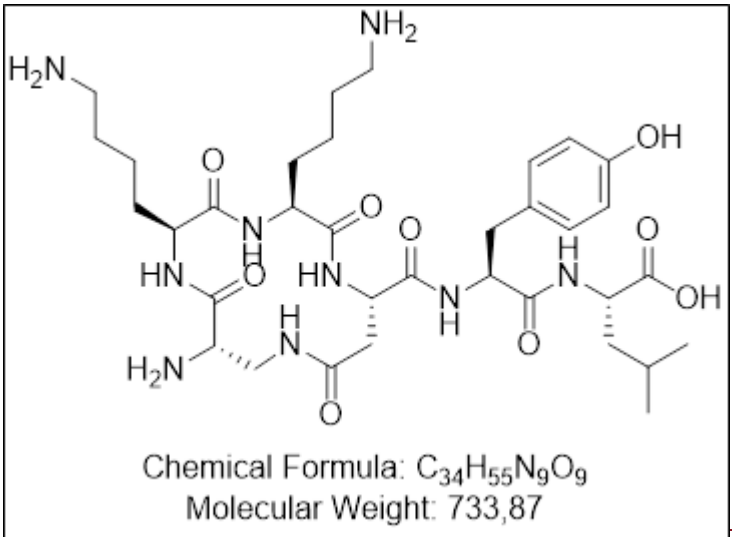
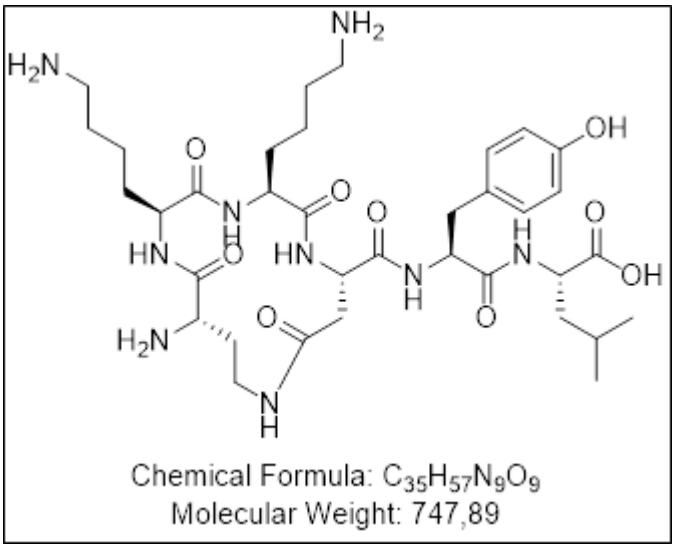
78.	 Chemical Formula $C_{35}H_{55}IN_8O_7$ Molecular Weight 826.78
79.	 Chemical Formula $C_{34}H_{54}N_8O_8$ Molecular Weight 702.85
80.	 Chemical Formula $C_{33}H_{52}N_8O_8$ Molecular Weight 688.83

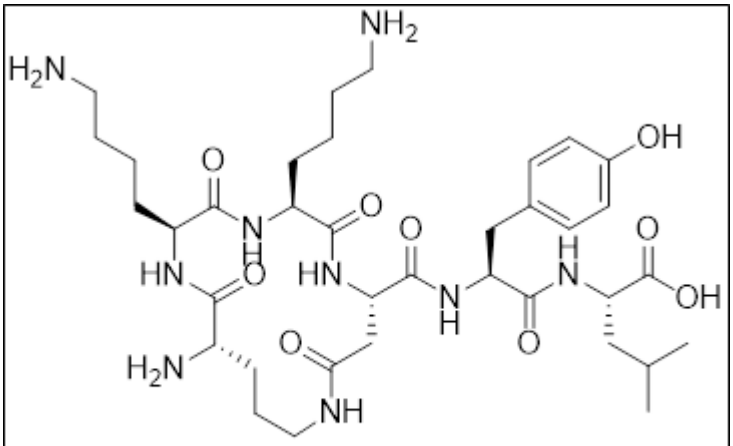
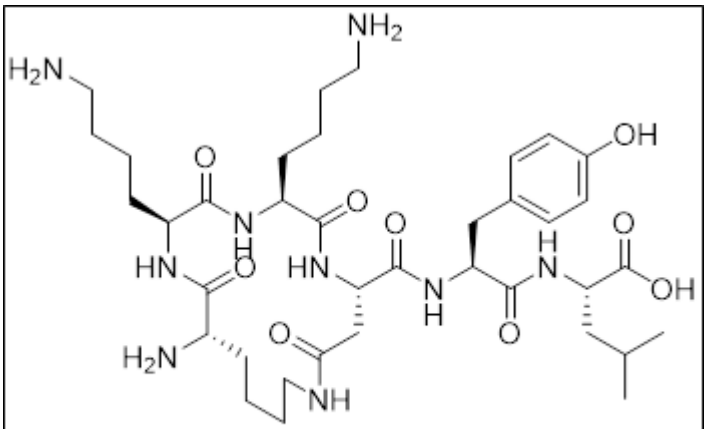
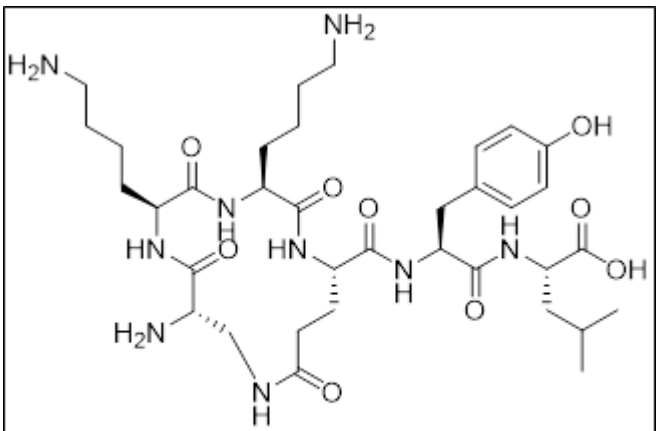
81.	 Chemical Formula $C_{32}H_{50}N_8O_8$ Molecular Weight 674.80
82.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88
83.	 Chemical Formula $C_{35}H_{51}N_9O_8$ Molecular Weight 725.85

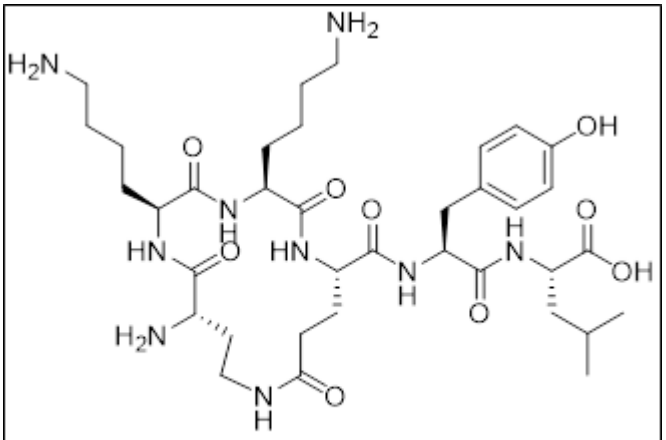
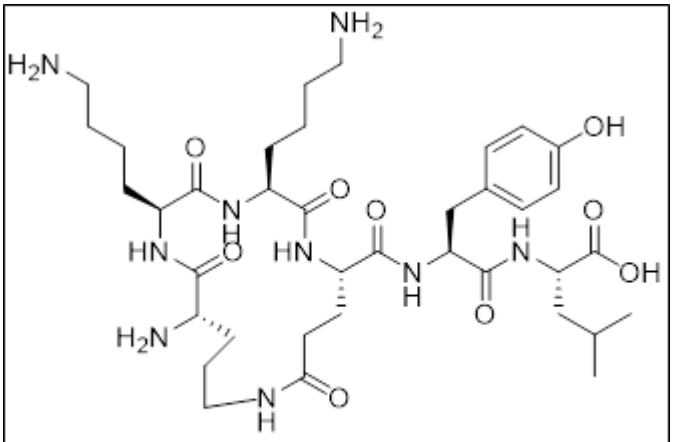
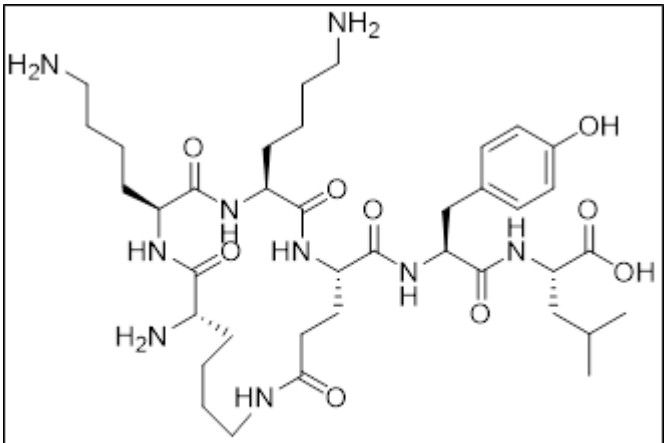
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86.	 Chemical Formula $C_{34}H_{53}N_7O_8$ Molecular Weight 687.84

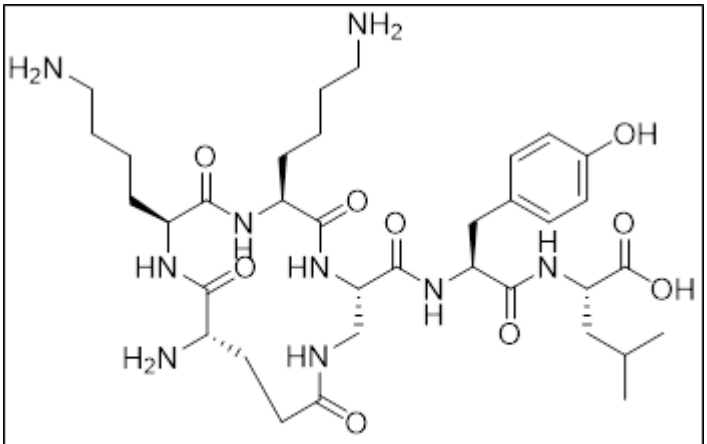
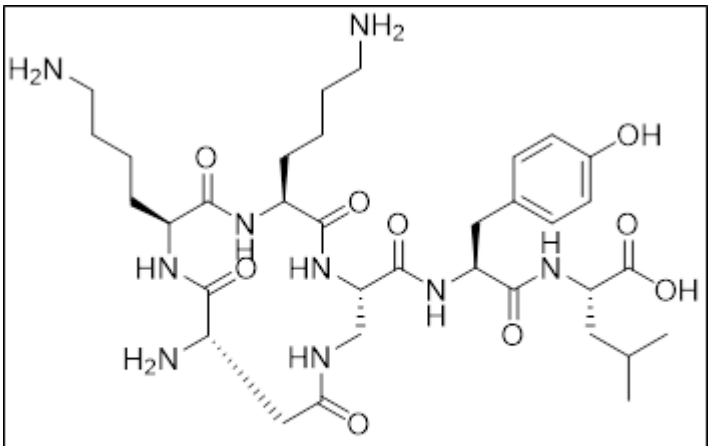
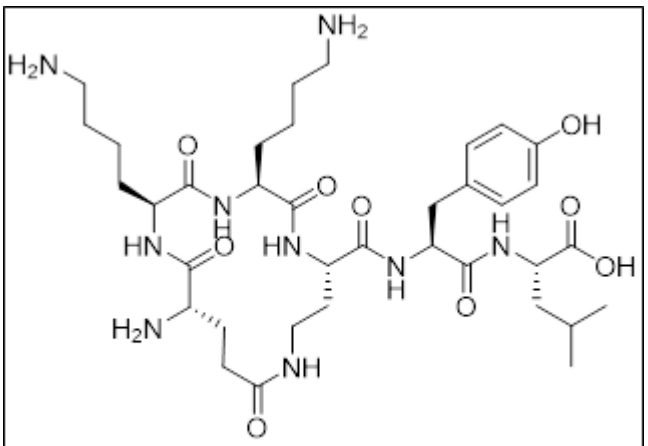
87.	 Chemical Formula $C_{31}H_{47}N_7O_8$ Molecular Weight 645.76
88.	 Chemical Formula $C_{34}H_{51}N_7O_{10}$ Molecular Weight 717.82
89.	 Chemical Formula $C_{38}H_{62}N_8O_8$ Molecular Weight 758.96

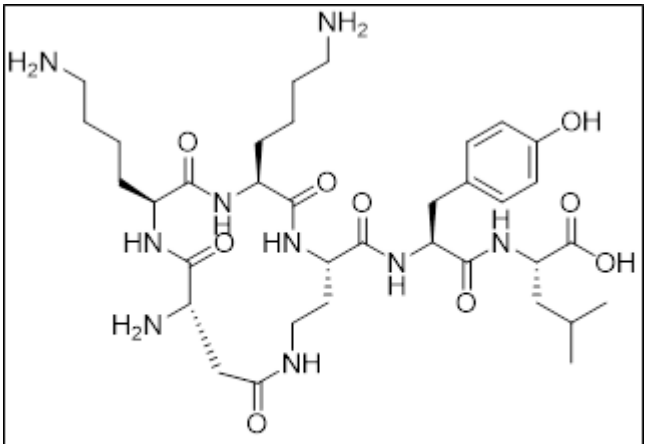
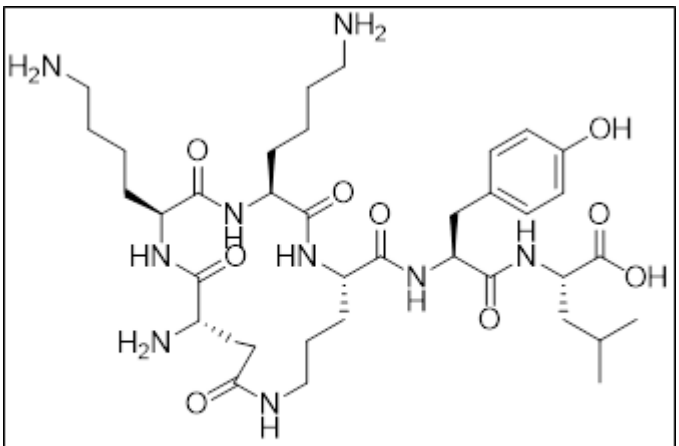
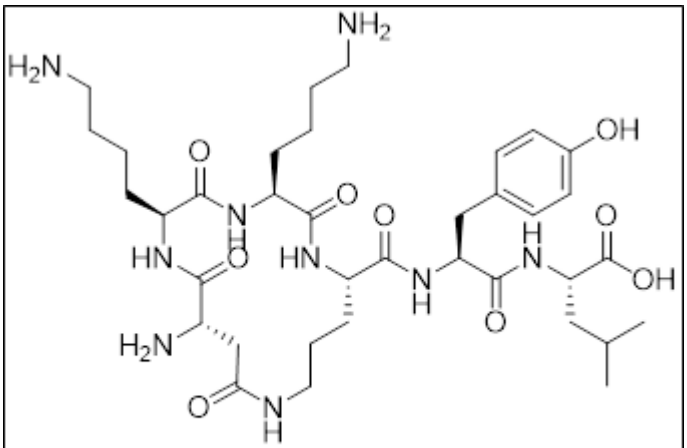
90.	 Chemical Formula $C_{38}H_{62}N_8O_8$ Molecular Weight 758.96
91.	 Chemical Formula $C_{38}H_{62}N_8O_8$ Molecular Weight 758.96
92.	 Chemical Formula $C_{38}H_{62}N_8O_8$ Molecular Weight 758.96

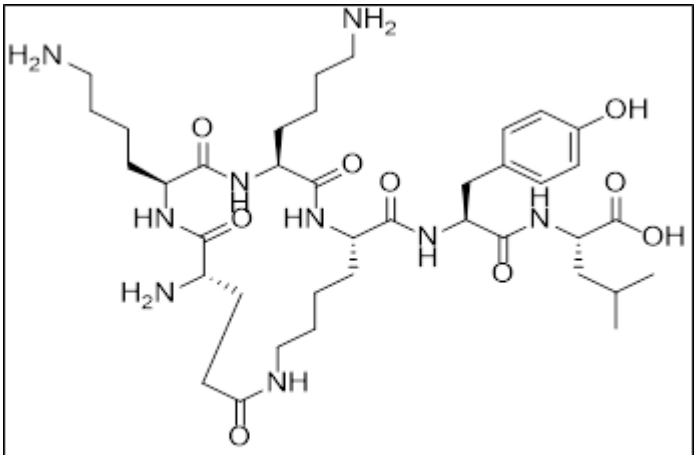
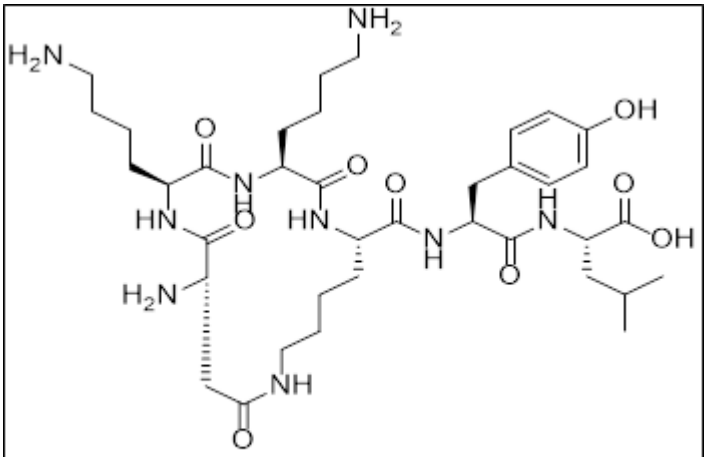
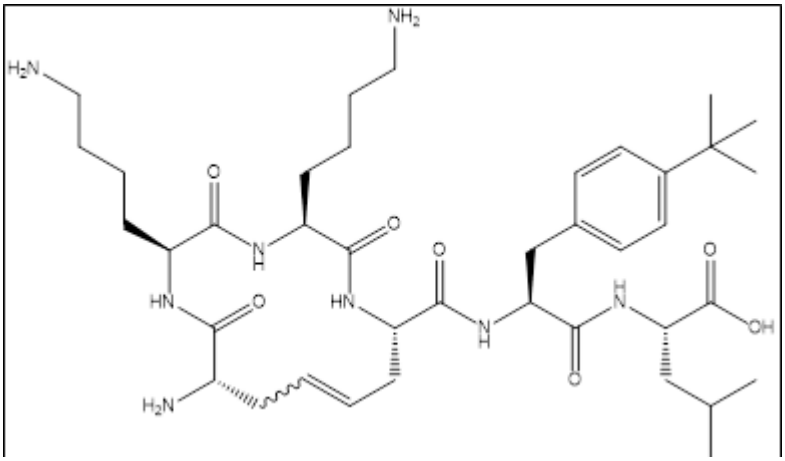
93.	 Chemical Formula $C_{41}H_{68}N_8O_8$ Molecular Weight 801.04
~~94.~~	 Chemical Formula: $C_{34}H_{55}N_9O_9$ Molecular Weight: 733,87
~~95.~~	 Chemical Formula: $C_{35}H_{57}N_9O_9$ Molecular Weight: 747,89

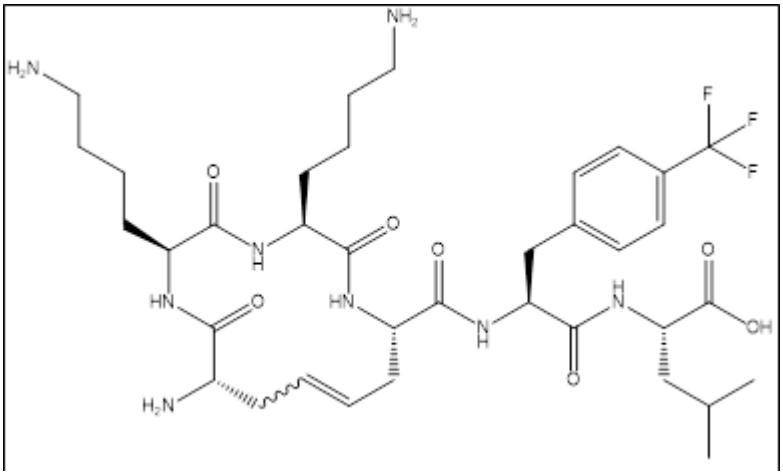
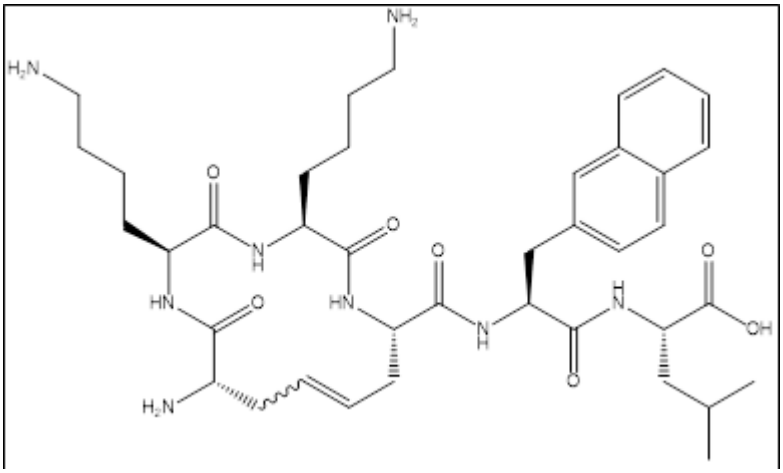
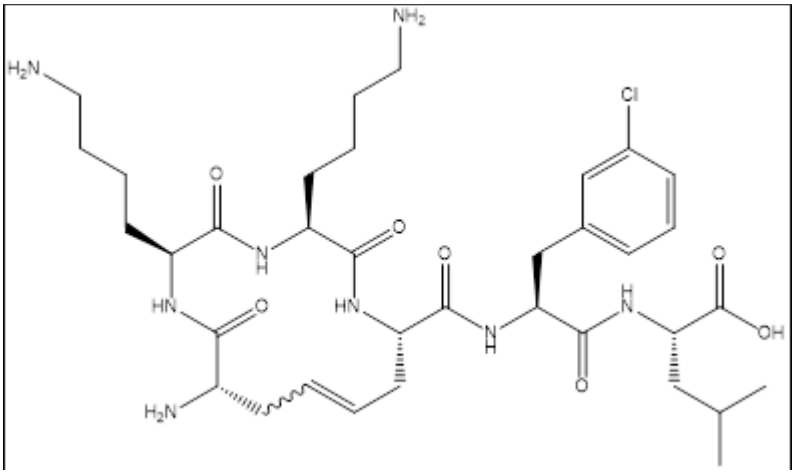
~~96.~~	 Chemical Formula: $C_{36}H_{59}N_9O_9$ Molecular Weight: 761,92
~~97.~~	 Chemical Formula: $C_{37}H_{61}N_9O_9$ Molecular Weight: 775,95
~~98.~~	 Chemical Formula: $C_{35}H_{57}N_9O_9$ Molecular Weight: 747,89

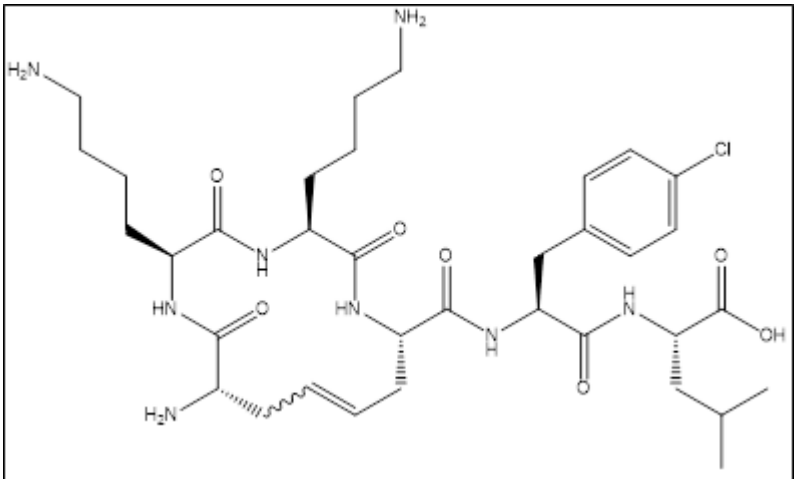
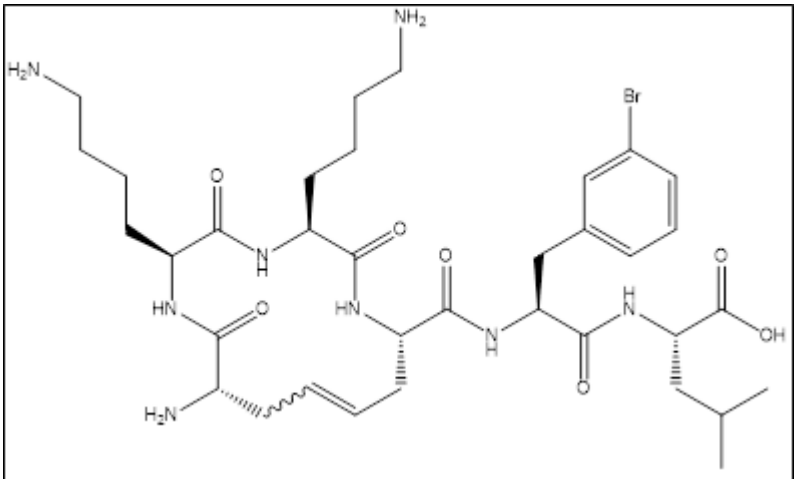
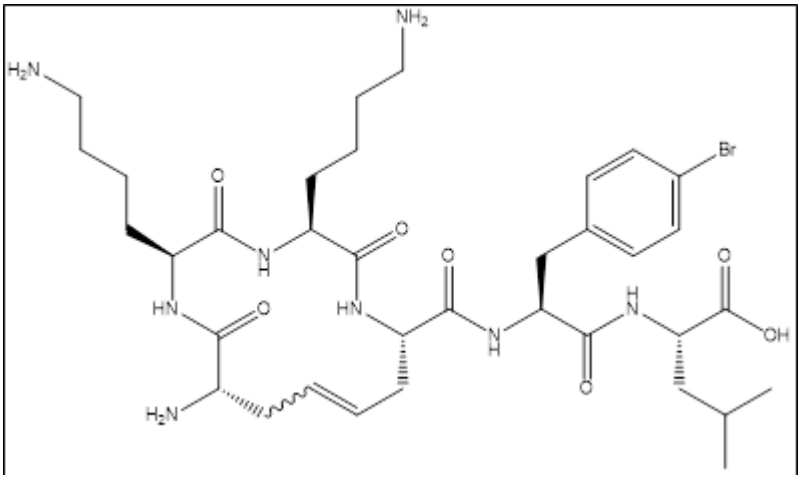
~~99.~~	 Chemical Formula: $C_{36}H_{59}N_9O_9$ Molecular Weight: 761,92
~~100.~~	 Chemical Formula: $C_{37}H_{61}N_9O_9$ Molecular Weight: 775,95
~~101.~~	 Chemical Formula: $C_{38}H_{63}N_9O_9$ Molecular Weight: 789,98

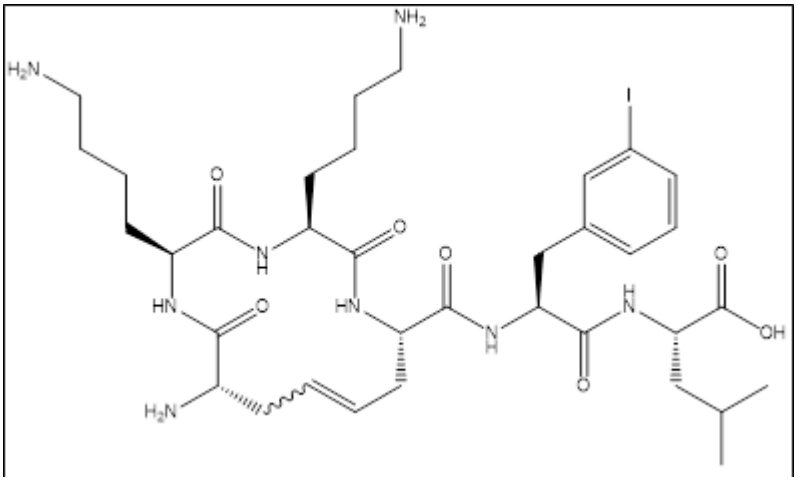
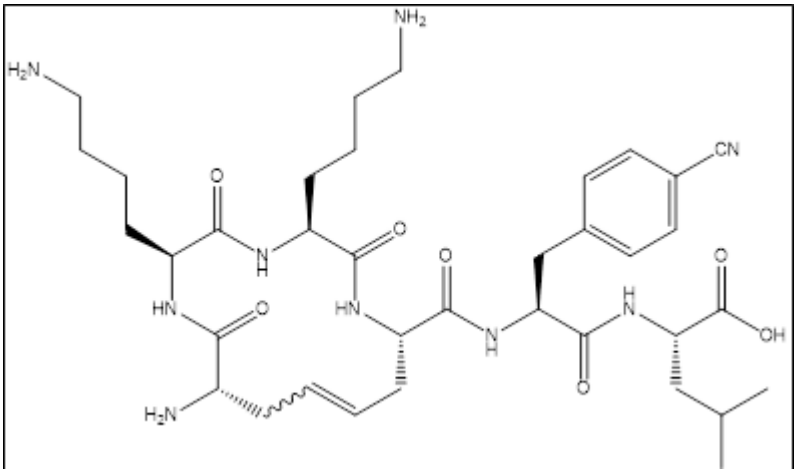
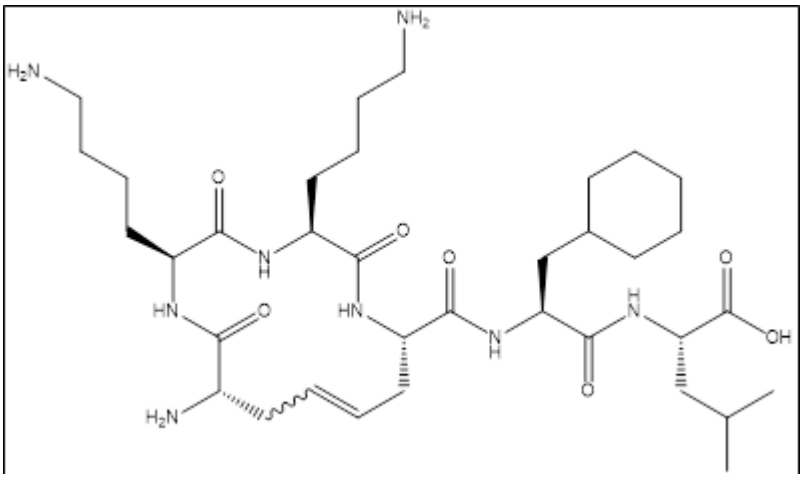
~~102.~~	 Chemical Formula: $C_{35}H_{57}N_9O_9$ Molecular Weight: 747,89
~~103.~~	 Chemical Formula: $C_{34}H_{55}N_9O_9$ Molecular Weight: 733,87
~~104.~~	 Chemical Formula: $C_{36}H_{59}N_9O_9$ Molecular Weight: 761,92

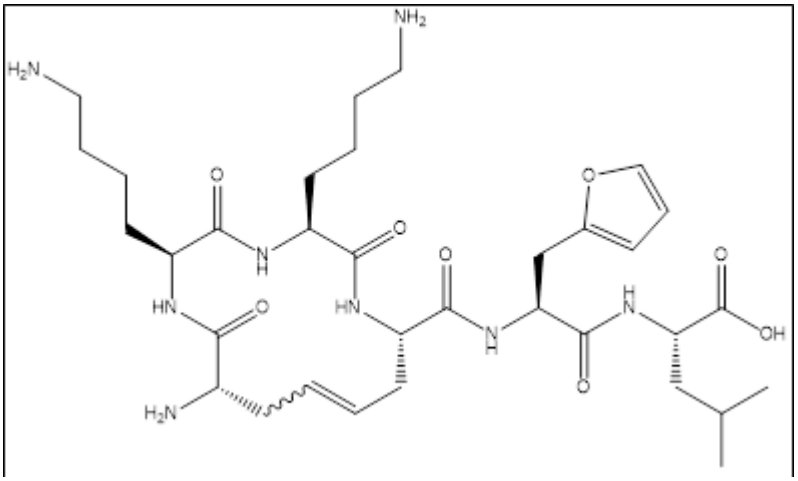
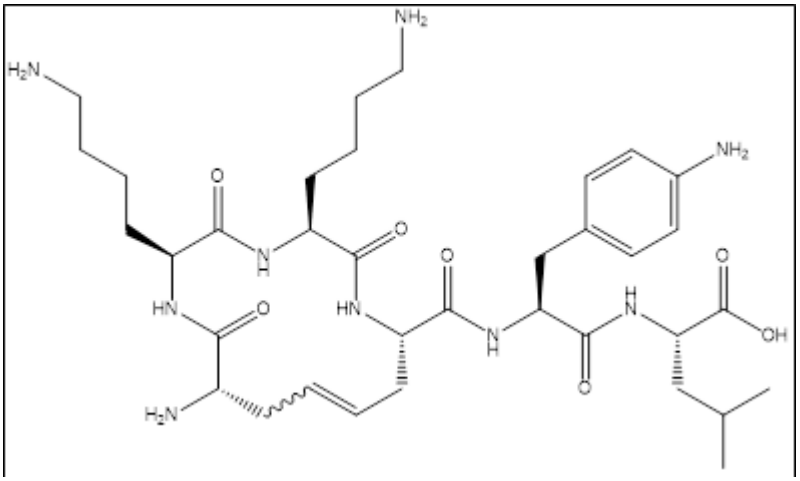
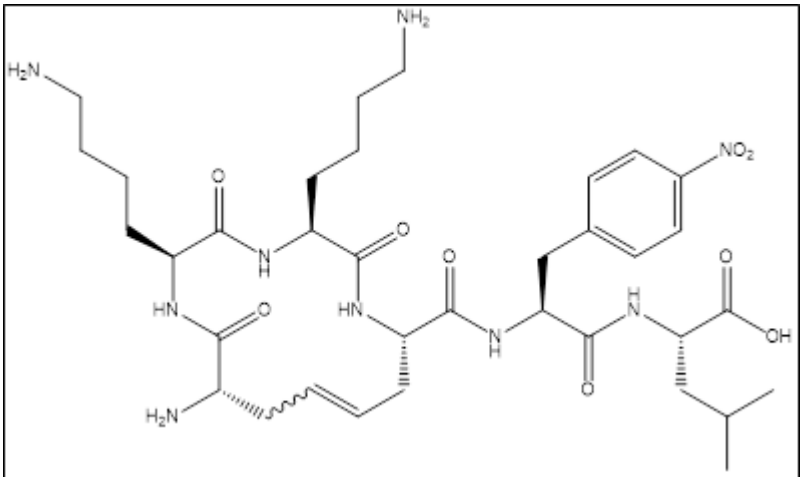
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~~107.~~	 Chemical Formula: $C_{36}H_{59}N_9O_9$ Molecular Weight: 761,92

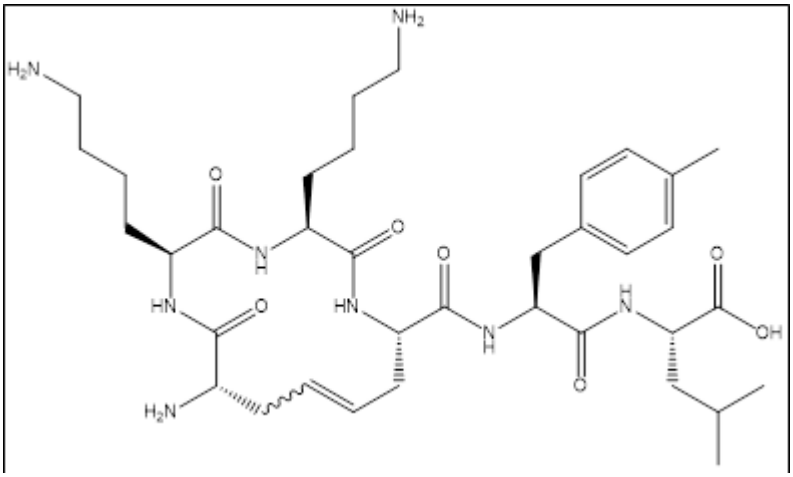
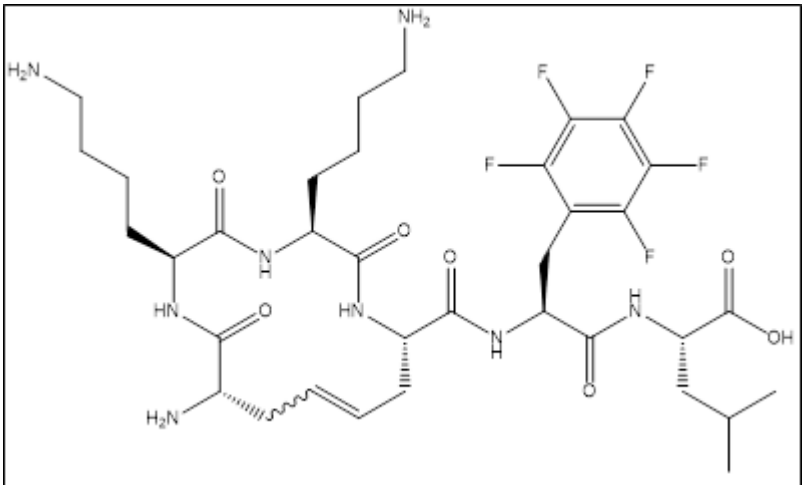
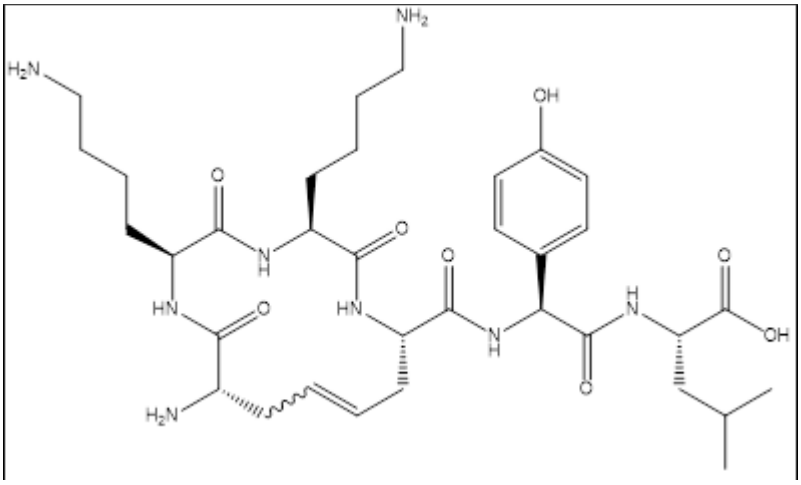
~~108.~~	 Chemical Formula: $C_{38}H_{63}N_9O_9$ Molecular Weight: 789,98
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110.	 Chemical Formula $C_{39}H_{64}N_8O_7$ Molecular Weight 756.99

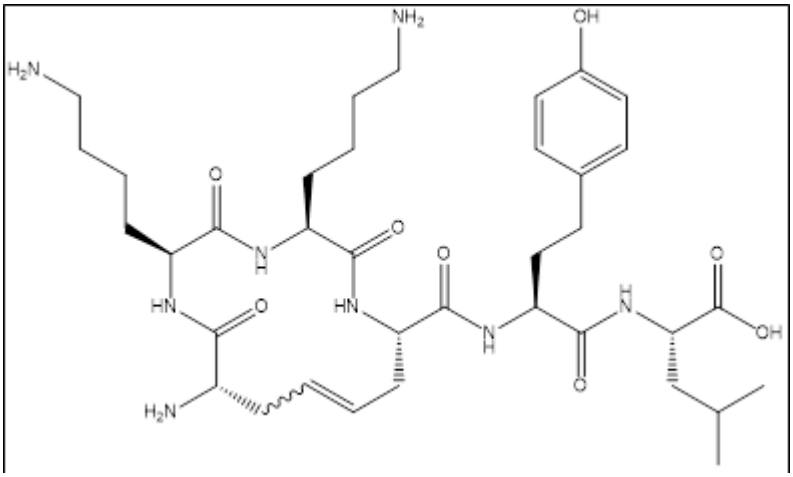
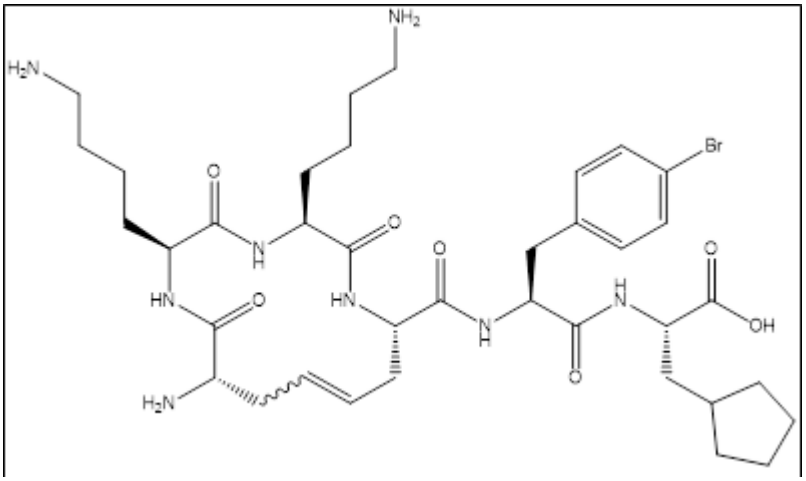
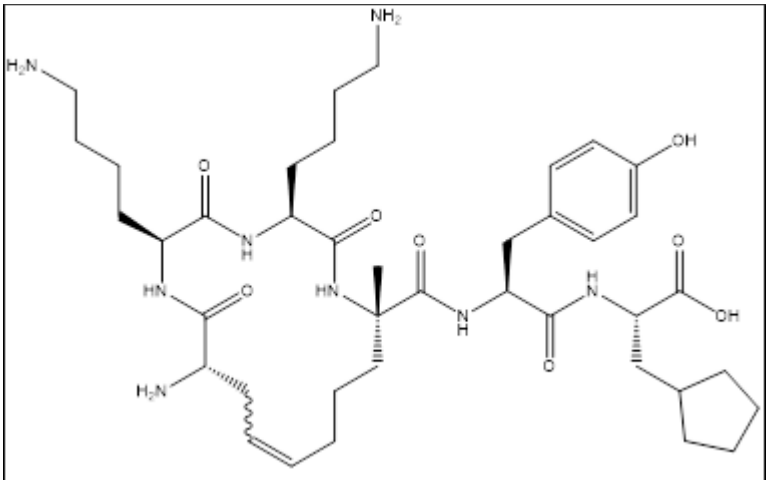
111.	 Chemical Formula $C_{36}H_{55}F_3N_8O_7$ Molecular Weight 768.88
112.	 Chemical Formula $C_{39}H_{58}N_8O_7$ Molecular Weight 750.94
113.	 Chemical Formula $C_{35}H_{55}ClN_8O_7$ Molecular Weight 735.32

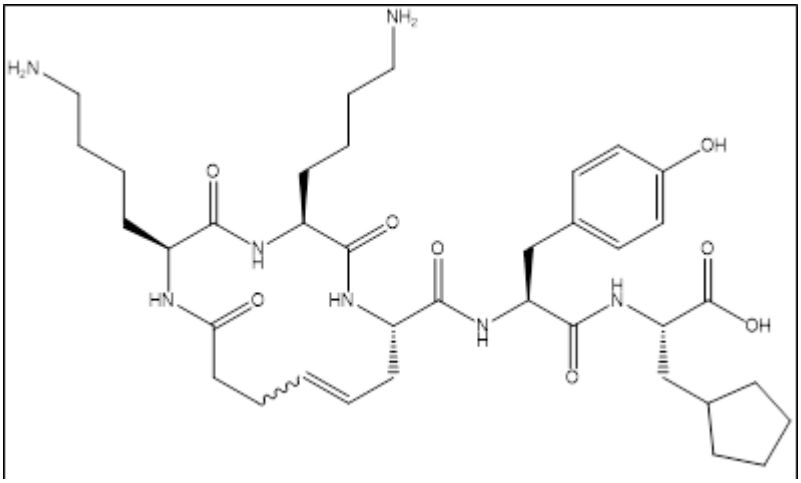
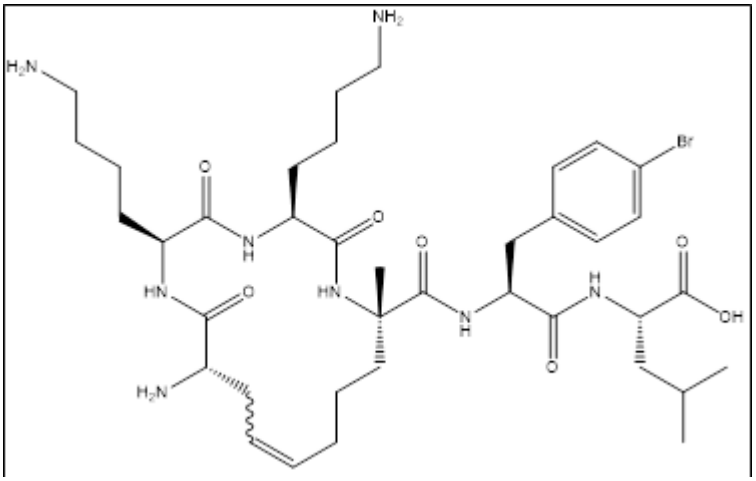
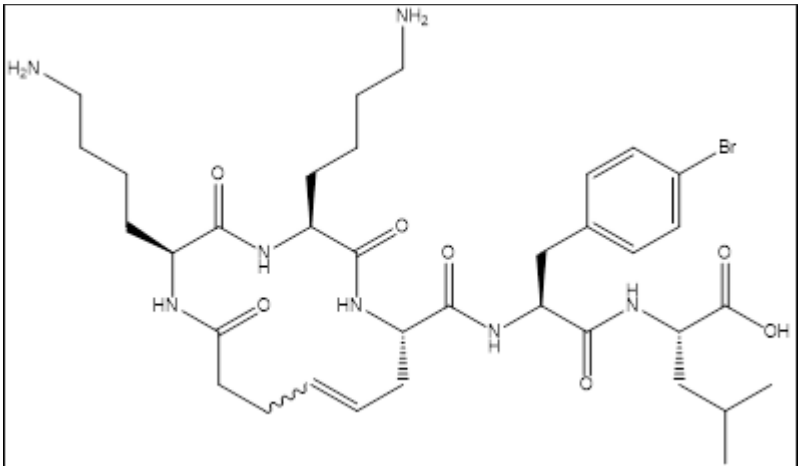
114.	 Chemical Formula $C_{35}H_{55}ClN_8O_7$ Molecular Weight 735.32
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116.	 Chemical Formula $C_{35}H_{55}BrN_8O_7$ Molecular Weight 779.78

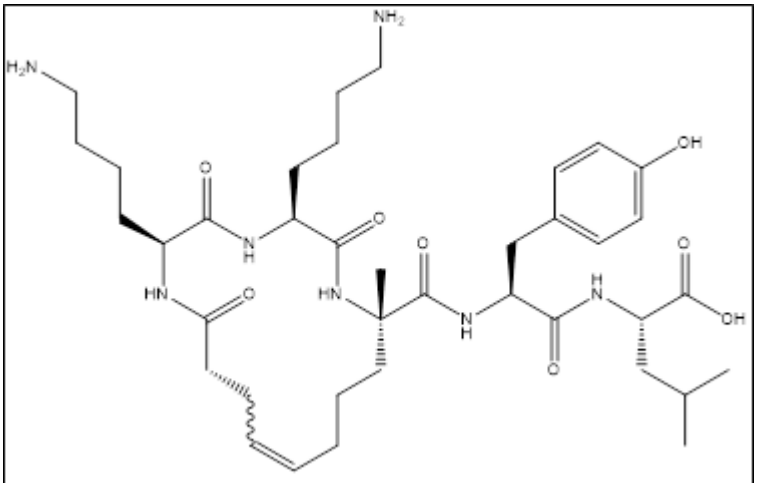
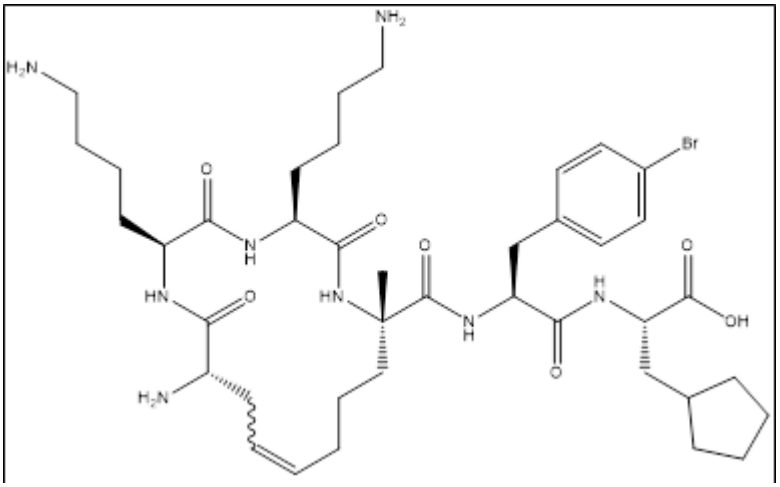
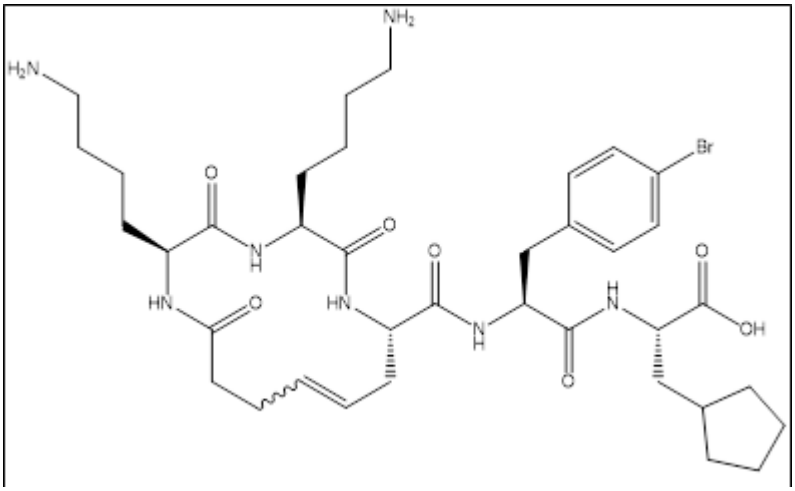
117.	 Chemical Formula $C_{35}H_{55}IN_8O_7$ Molecular Weight 826.78
118.	 Chemical Formula $C_{36}H_{55}N_9O_7$ Molecular Weight 725.89
119.	 Chemical Formula $C_{35}H_{62}N_8O_7$ Molecular Weight 706.93

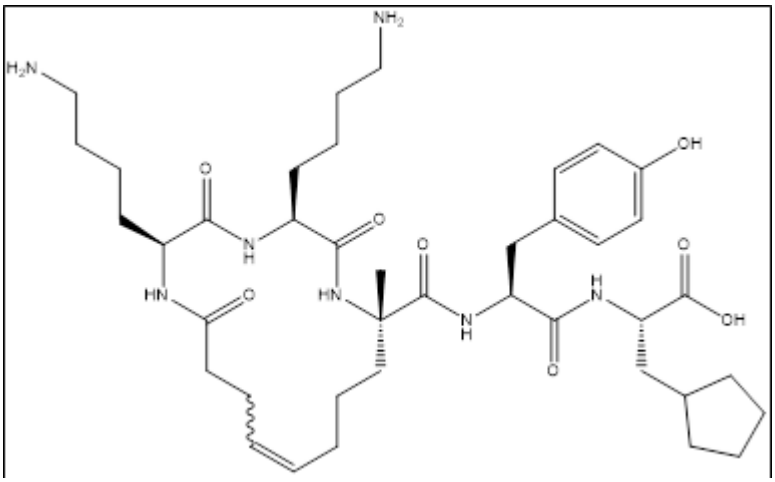
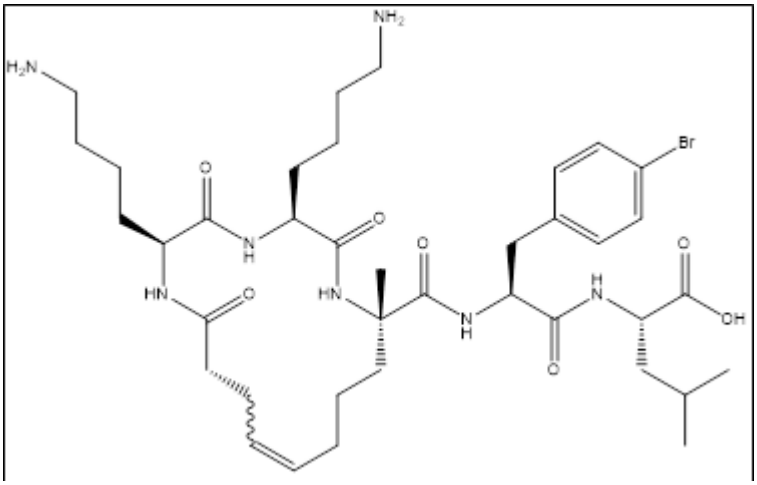
120.	 Chemical Formula $C_{33}H_{54}N_8O_8$ Molecular Weight 690.84
121.	 Chemical Formula $C_{35}H_{57}N_9O_7$ Molecular Weight 715.90
122.	 Chemical Formula $C_{35}H_{55}N_9O_9$ Molecular Weight 745.88

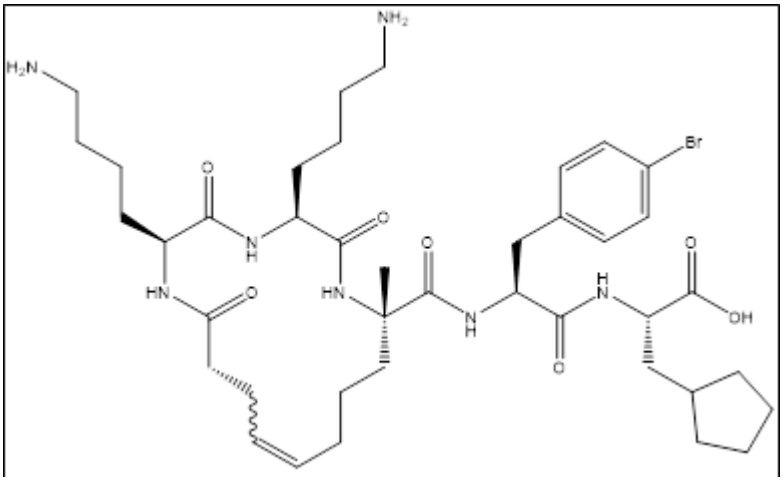
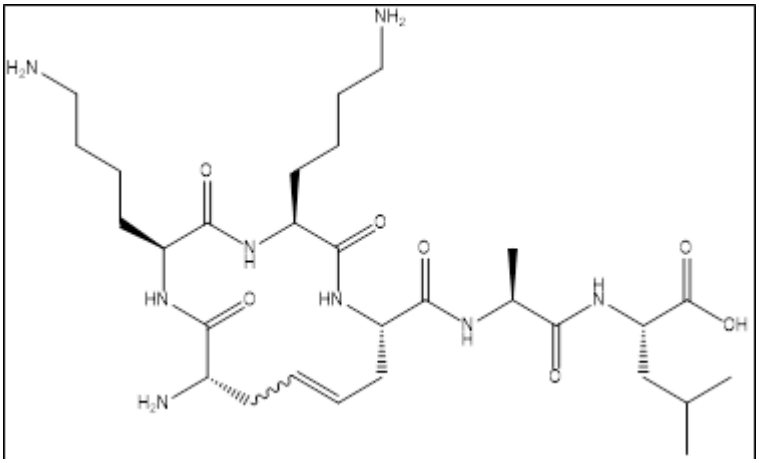
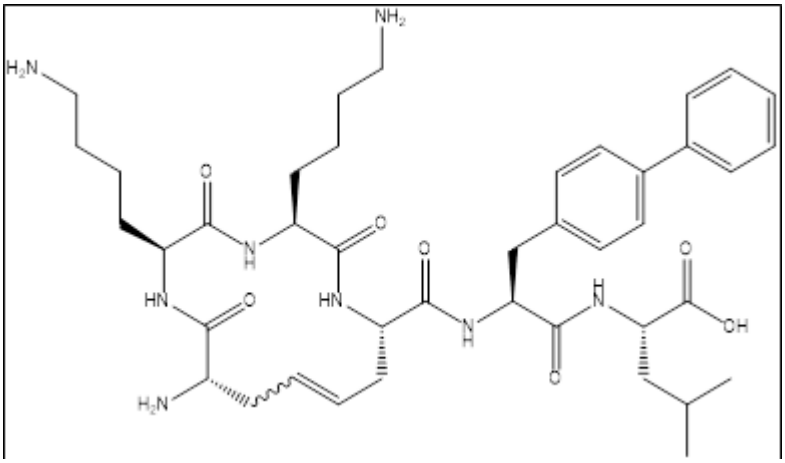
123.	 Chemical Formula $C_{36}H_{58}N_8O_7$ Molecular Weight 714.91
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125.	 Chemical Formula $C_{34}H_{54}N_8O_8$ Molecular Weight 702.85

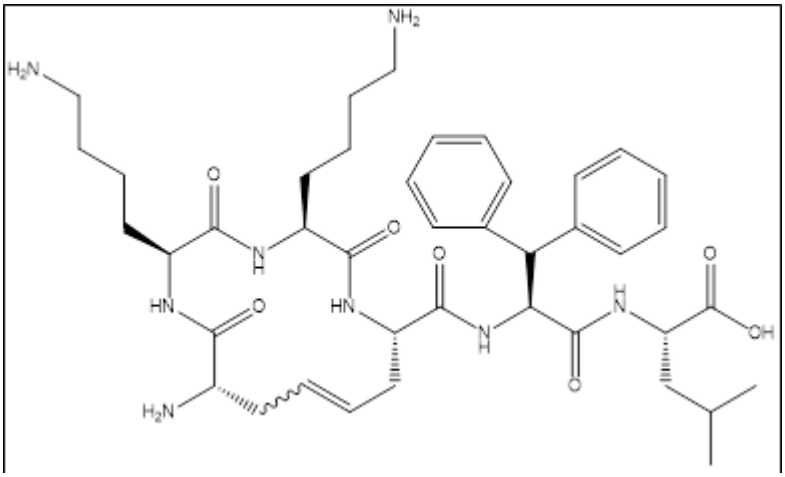
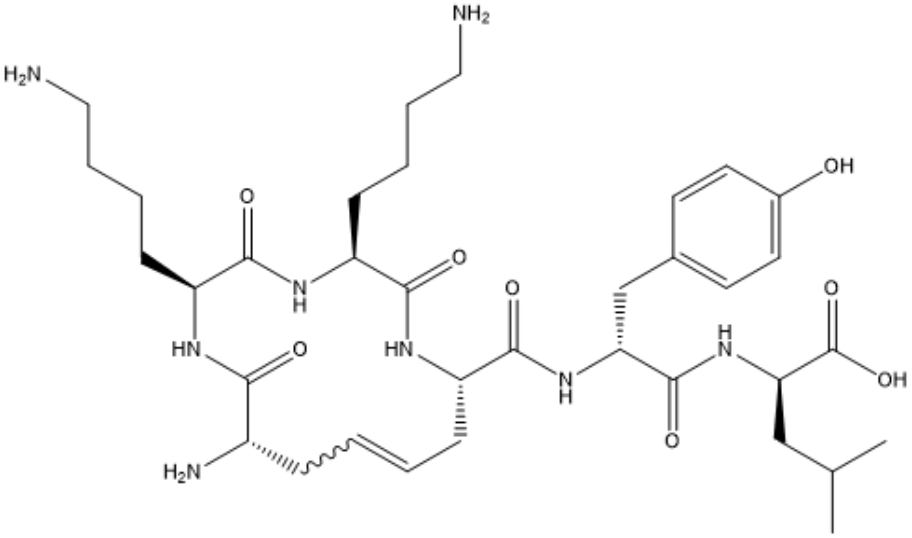
126.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91
127.	 Chemical Formula $C_{37}H_{57}BrN_8O_7$ Molecular Weight 805.82
128.	 Chemical Formula $C_{40}H_{64}N_8O_8$ Molecular Weight 785.00

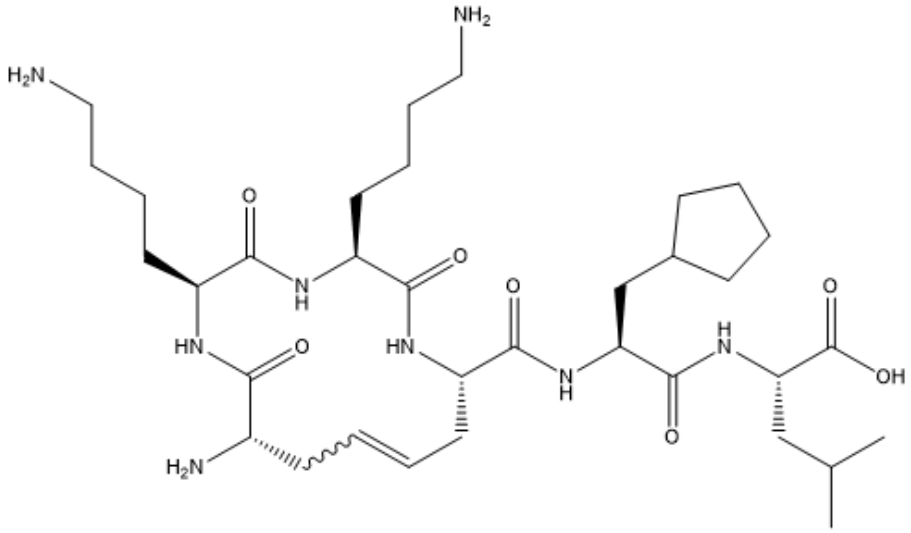
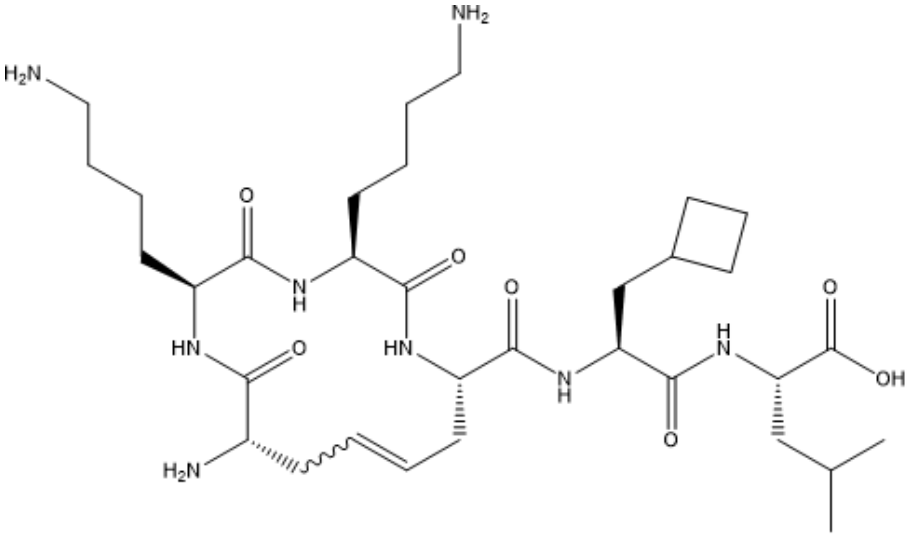
129.	 Chemical Formula $C_{37}H_{57}N_7O_8$ Molecular Weight 727.90
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131.	 Chemical Formula $C_{35}H_{54}BrN_7O_7$ Molecular Weight 764.76

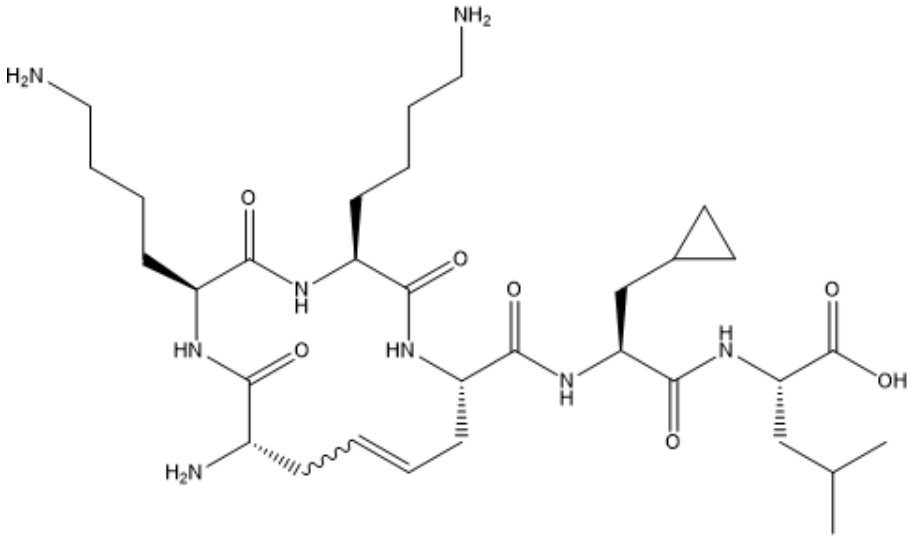
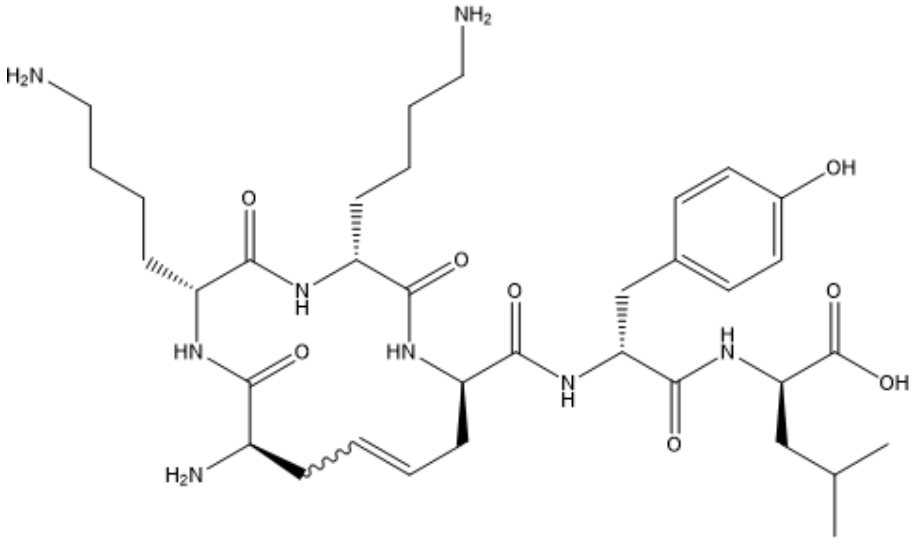
132.	 Chemical Formula $C_{38}H_{61}N_7O_8$ Molecular Weight 743.95
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134.	 Chemical Formula $C_{37}H_{56}BrN_7O_7$

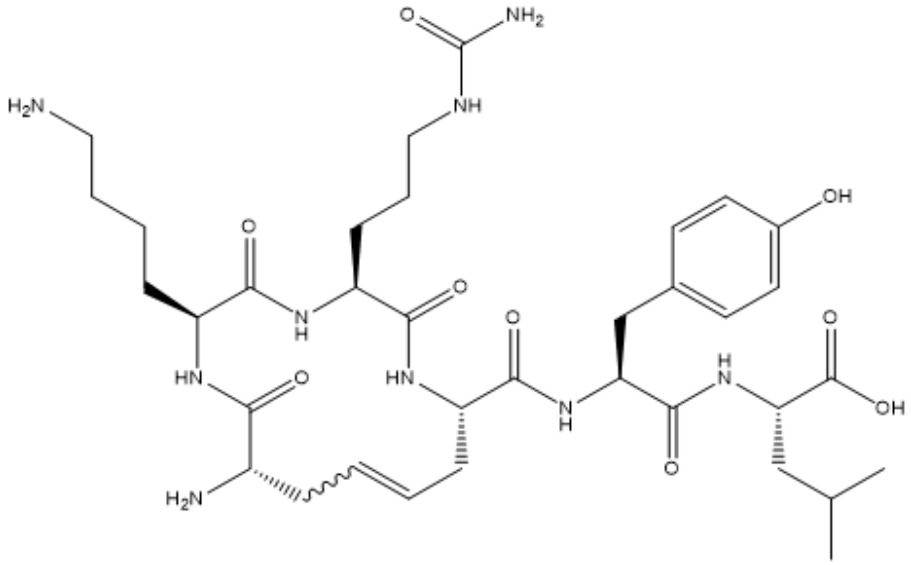
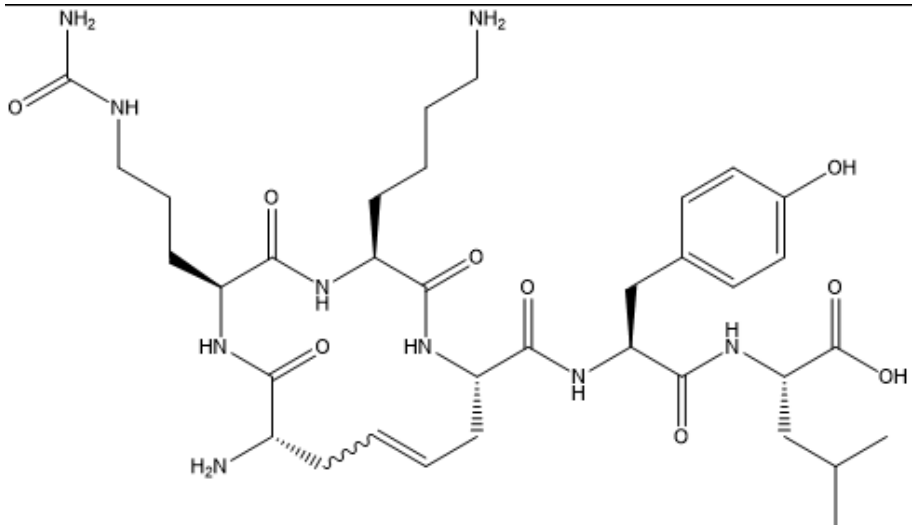
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136.	 Chemical Formula $C_{38}H_{60}BrN_7O_7$ Molecular Weight 806.84

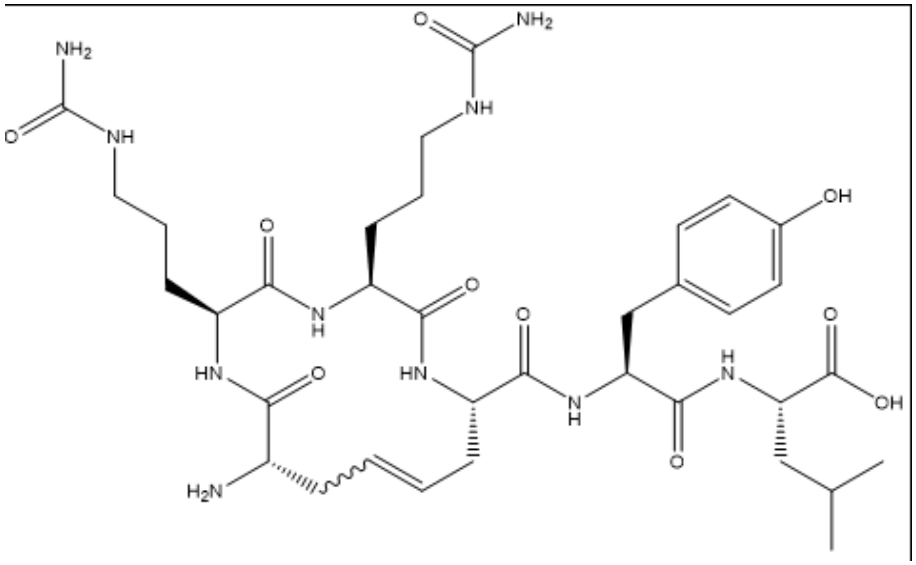
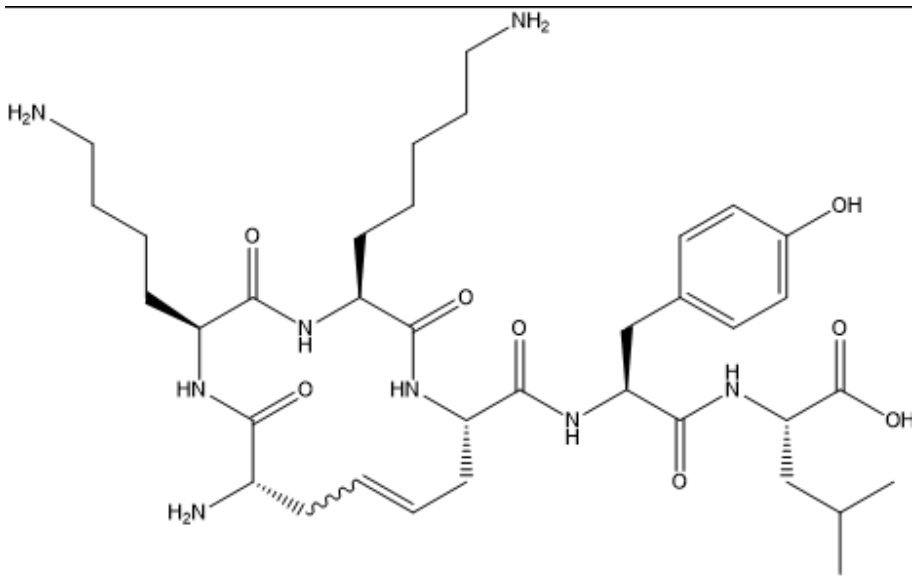
137.	 Chemical Formula $C_{40}H_{62}BrN_7O_7$ Molecular Weight 832.88
138.	 Chemical Formula $C_{29}H_{52}N_8O_7$ Molecular Weight 624.78
139.	 Chemical Formula $C_{41}H_{60}N_8O_7$ Molecular Weight 776.98

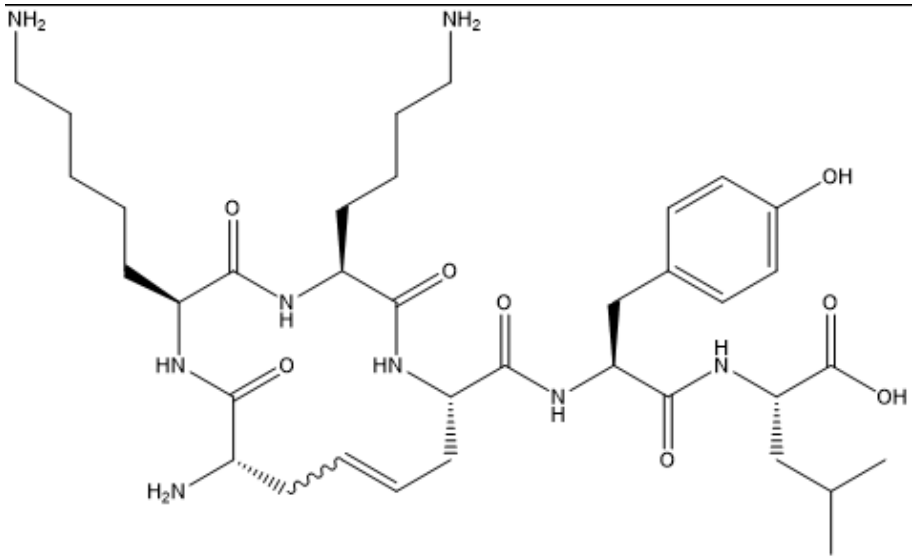
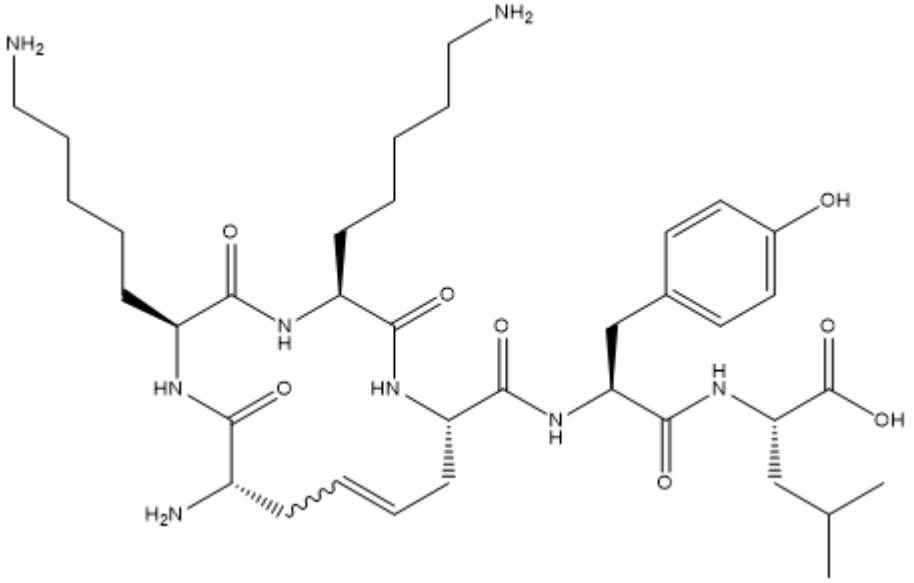
140.	 Chemical Formula $C_{41}H_{60}N_8O_7$ Molecular Weight 776.98
141.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88

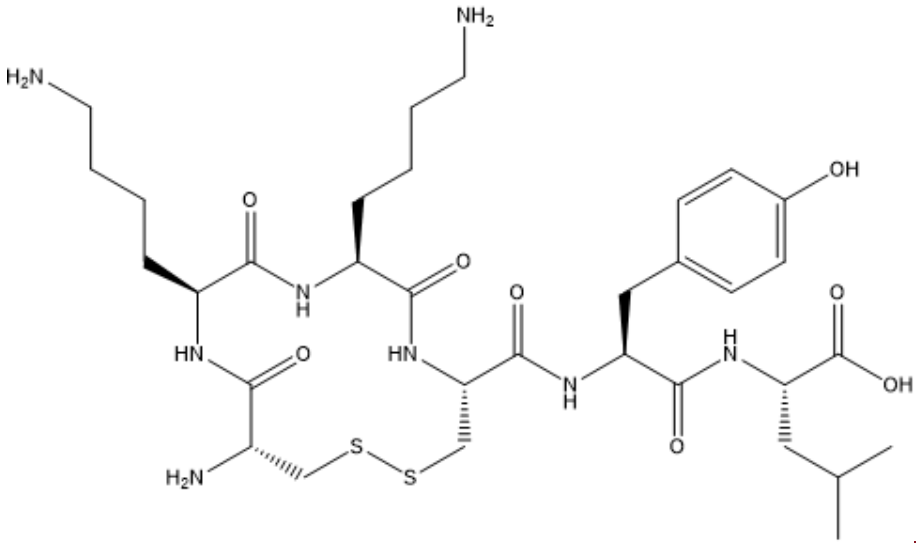
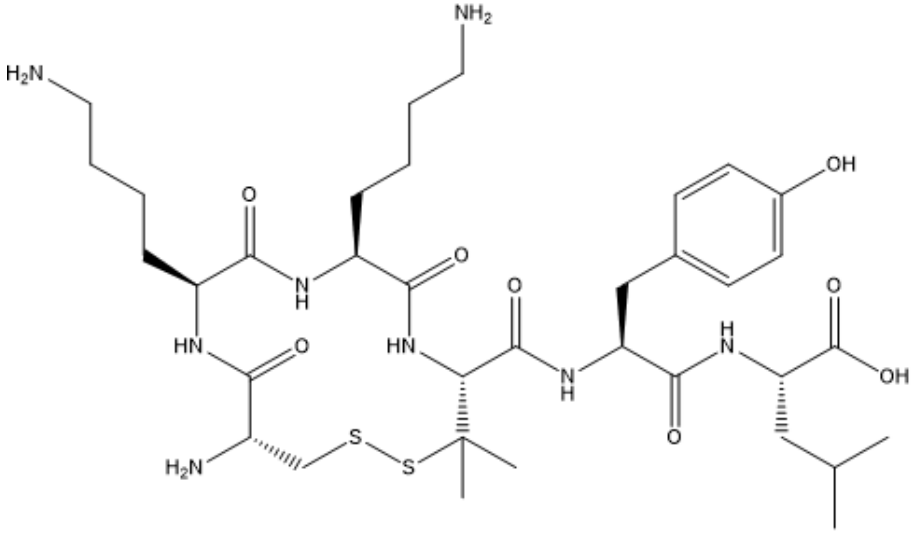
142.	 Chemical Formula $C_{34}H60N_8O_7$ Molecular Weight 692.90
143.	 Chemical Formula $C_{33}H_{58}N_8O7$ Molecular Weight 678.88

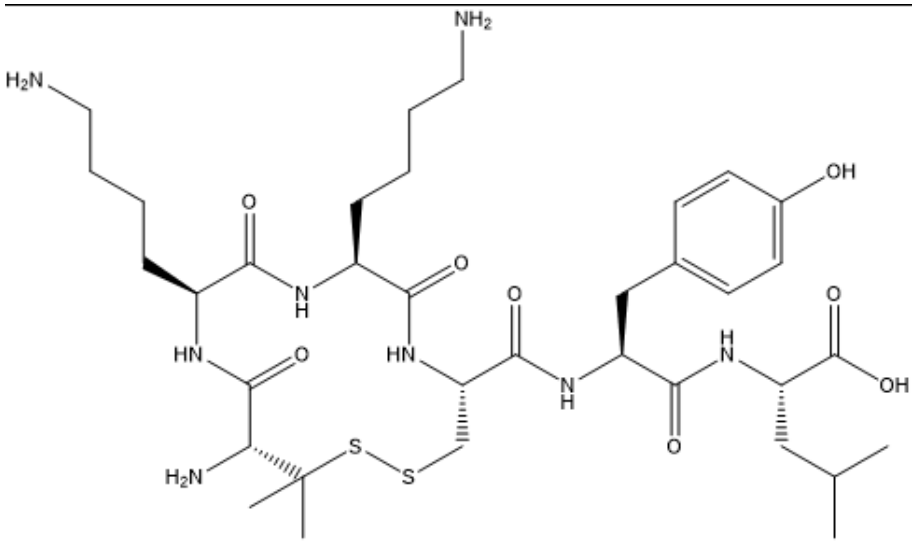
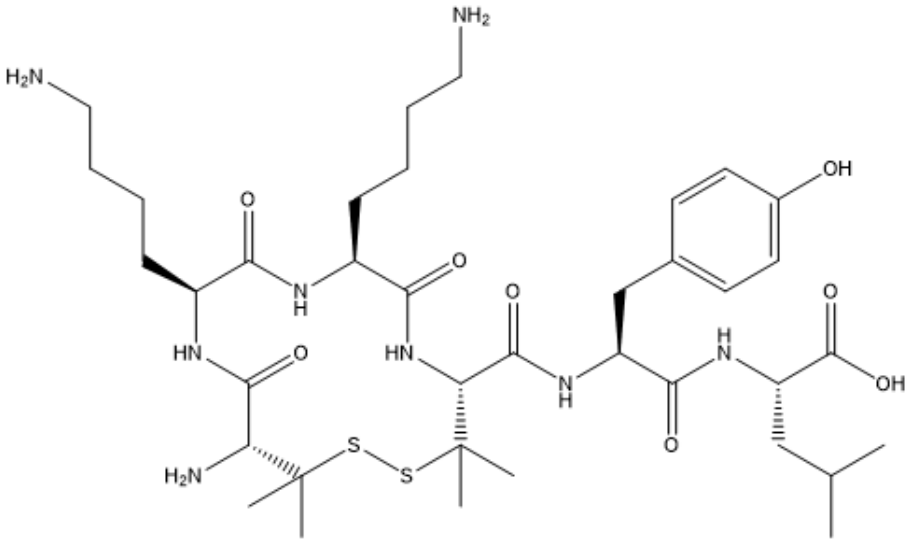
144.	 Chemical Formula $C_{32}H_{56}N_8O_7$ Molecular Weight 664.85
145.	 Chemical Formula $C_{35}H_{56}N_8O_8$ Molecular Weight 716.88

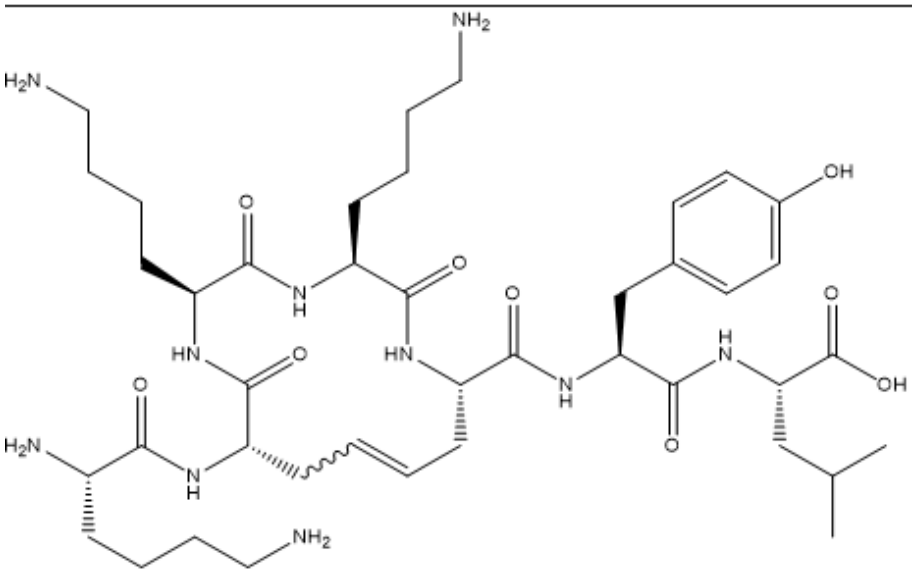
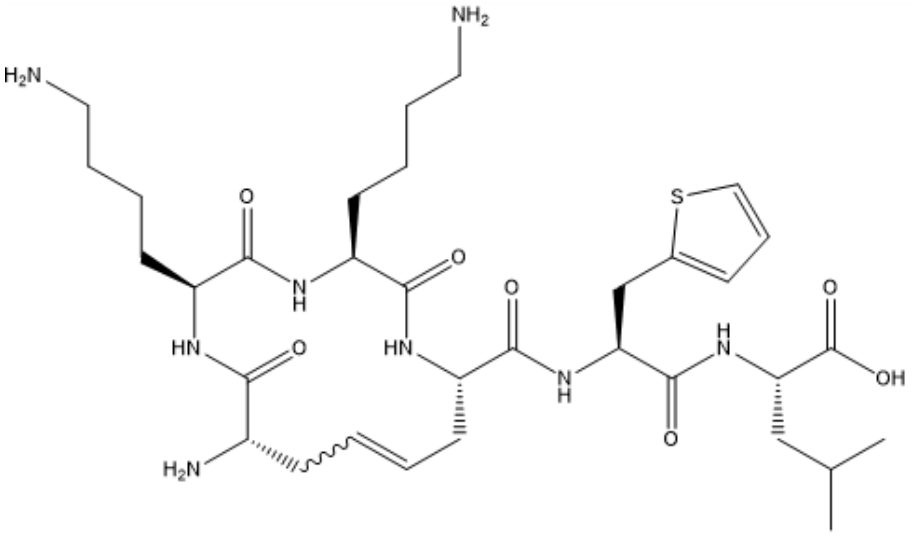
146.	 Chemical Formula $C_{35}H_{55}N_9O_9$ Molecular Weight 745.88
147.	 Chemical Formula $C_{35}H_{55}N_9O_9$ Molecular Weight 745.88

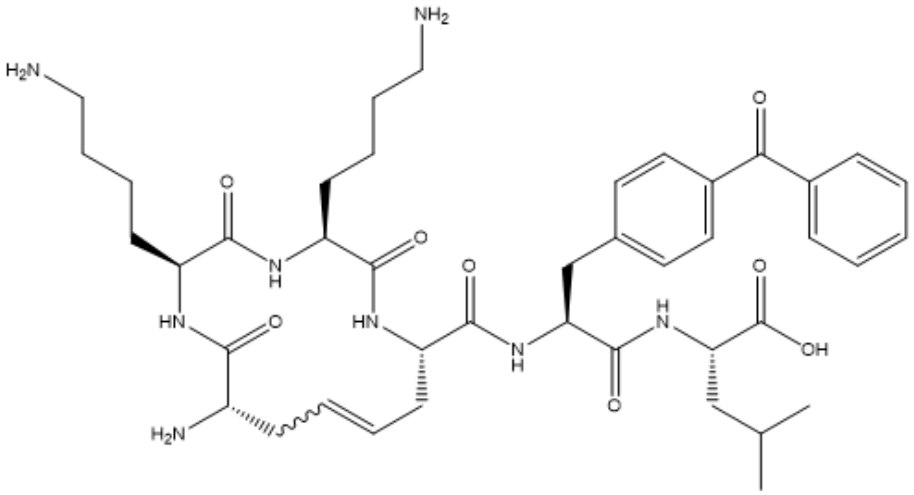
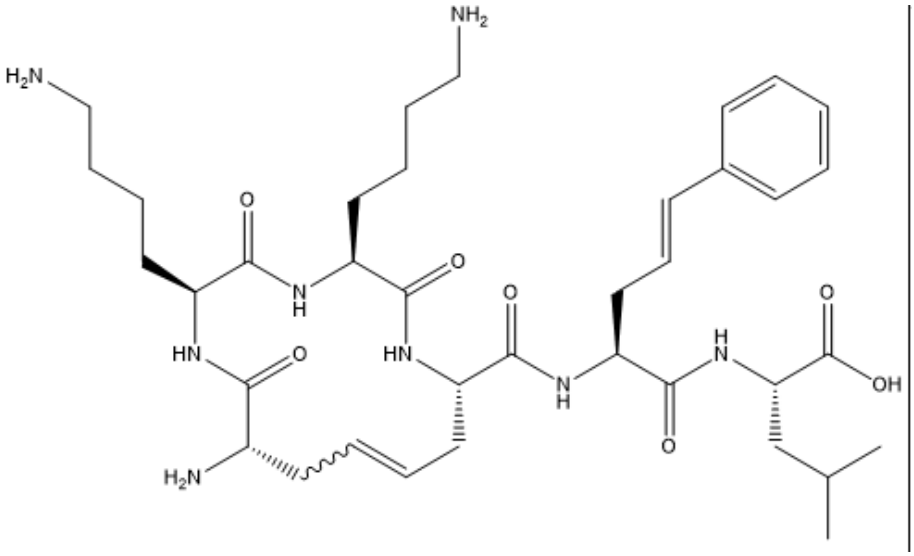
148.	 Chemical Formula $C_{35}H_{54}N_{10}O_{10}$ Molecular Weight 774.88
149.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91

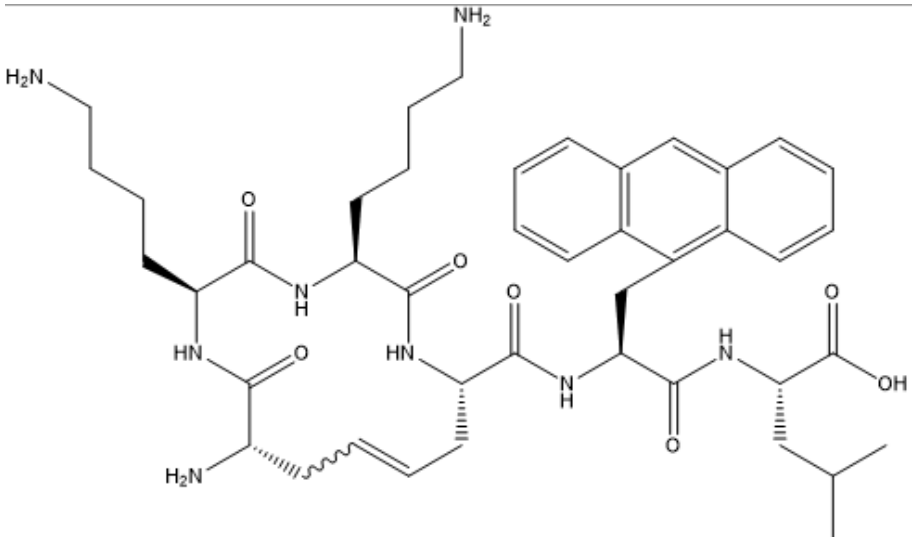
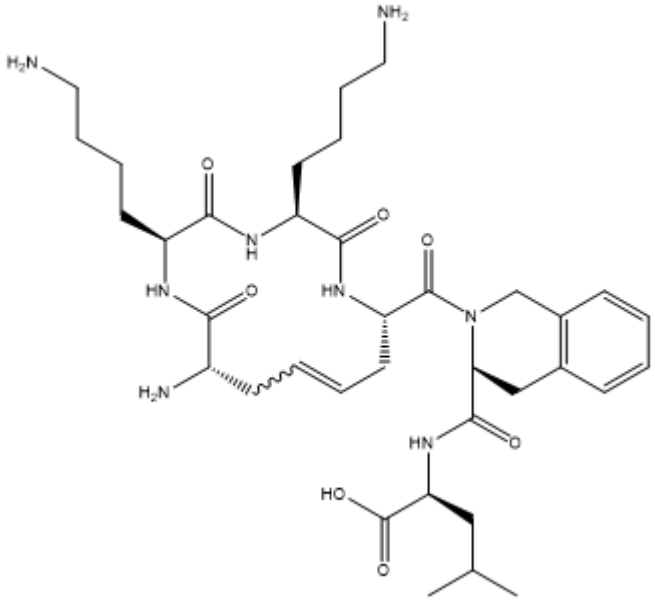
150.	 Chemical Formula $C_{36}H_{58}N_8O_8$ Molecular Weight 730.91
151.	 Chemical Formula $C_{37}H_{60}N_8O_8$ Molecular Weight 744.93

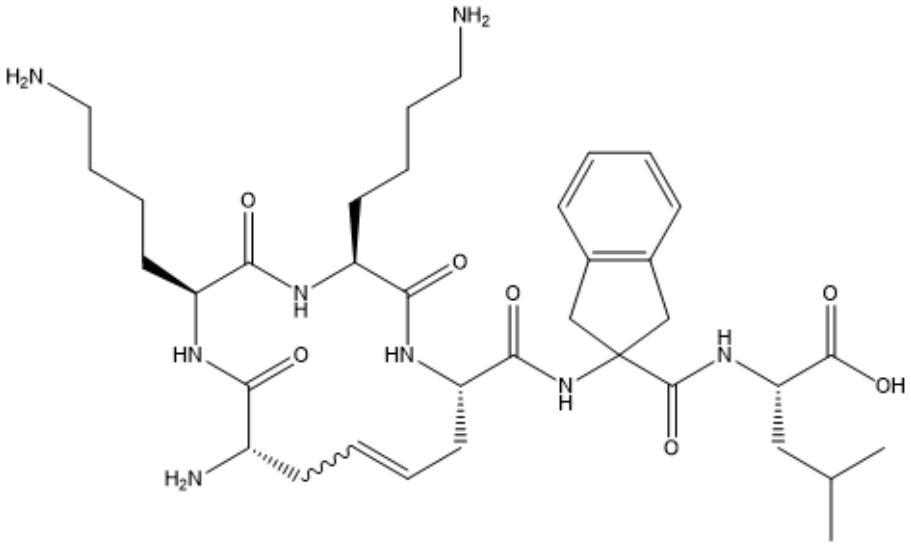
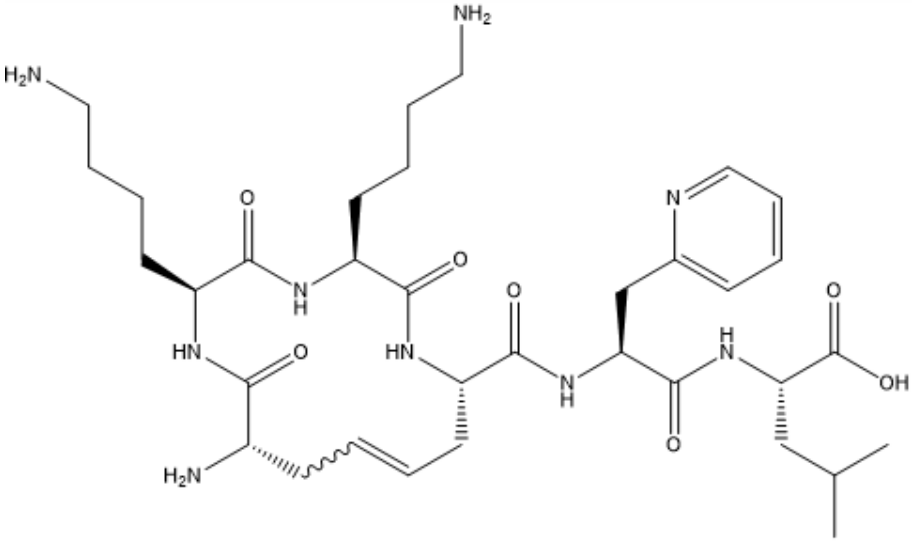
~~152.~~	 ~~Chemical Formula $C_{33}H_{54}N_8O_8S_2$~~ ~~Molecular Weight 754.96~~
~~153.~~	 ~~Chemical Formula $C_{35}H_{58}N_8O_8S_2$~~ ~~Molecular Weight 783.02~~

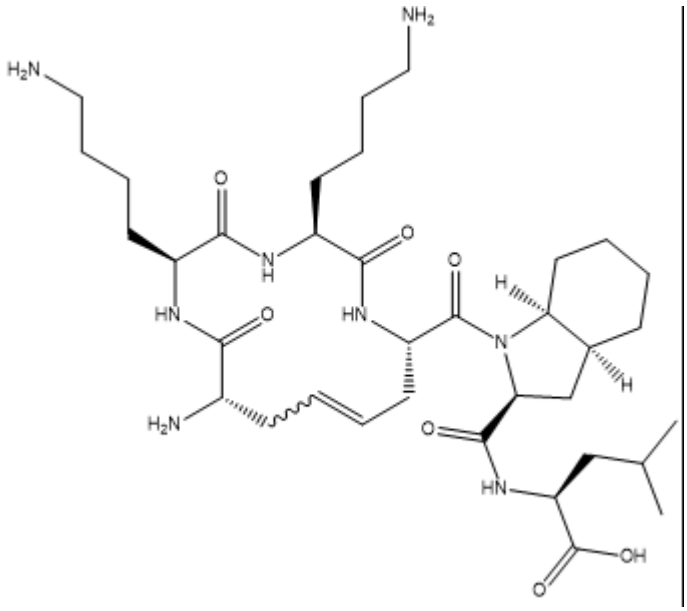
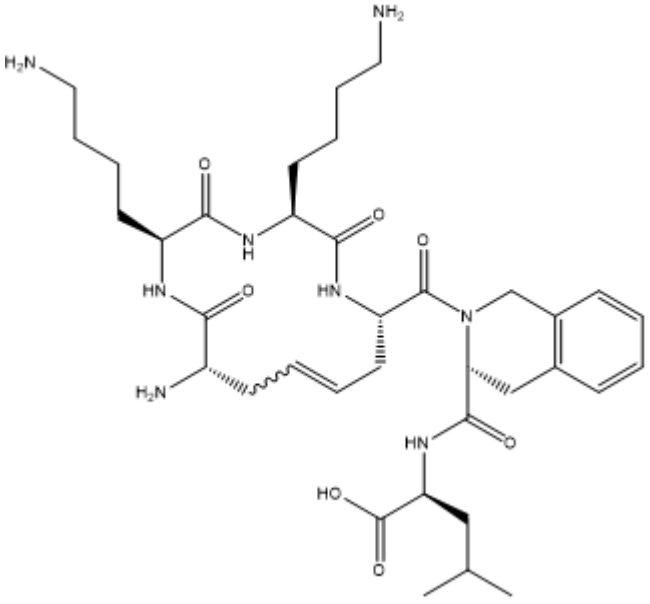
~~154.~~	 ~~Chemical Formula $C_{35}H_{58}N_8O_8S_2$~~ ~~Molecular Weight 783.02~~
~~155.~~	 ~~Chemical Formula $C_{37}H_{62}N_8O_8S_2$~~ ~~Molecular Weight 811.07~~

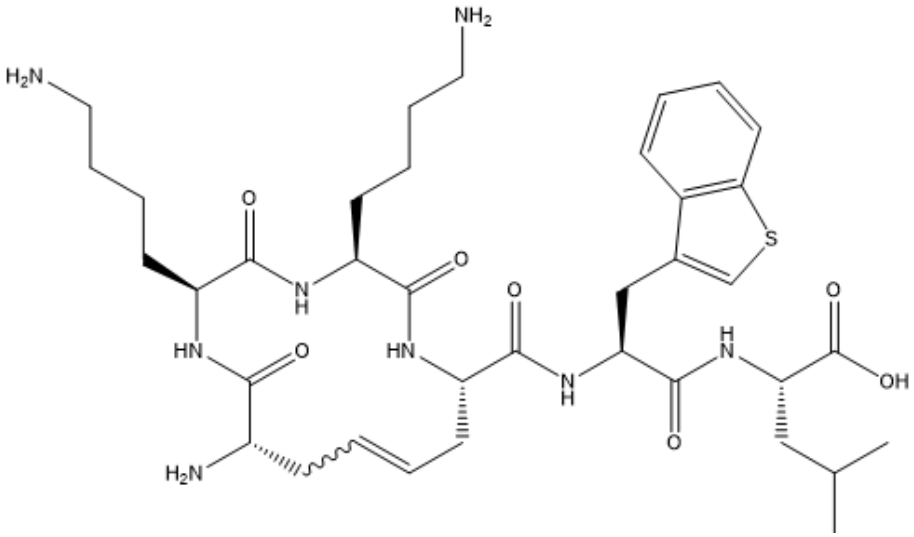
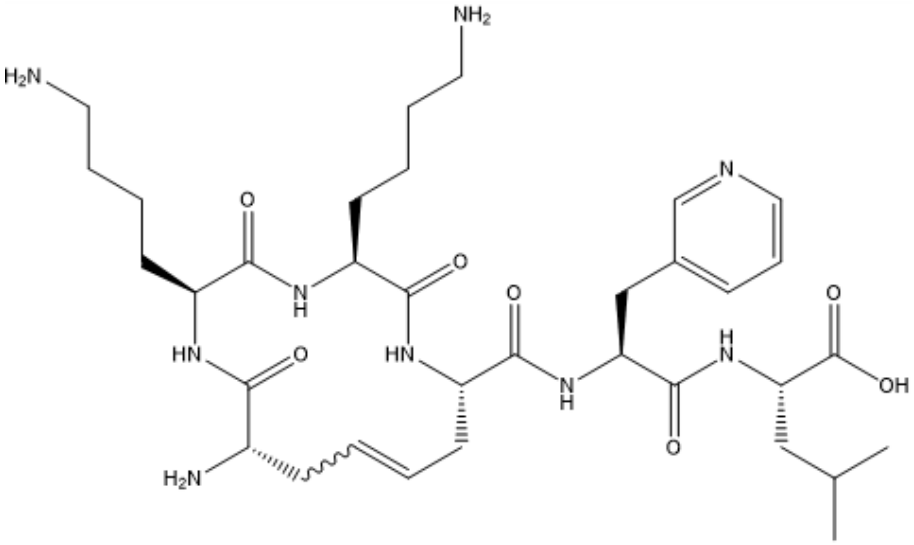
156.	 Chemical Formula $C_{41}H_{68}N_{10}O_9$ Molecular Weight 845.06
159.	 Chemical Formula $C_{33}H_{54}N_8O_7S$ Molecular Weight 706.90

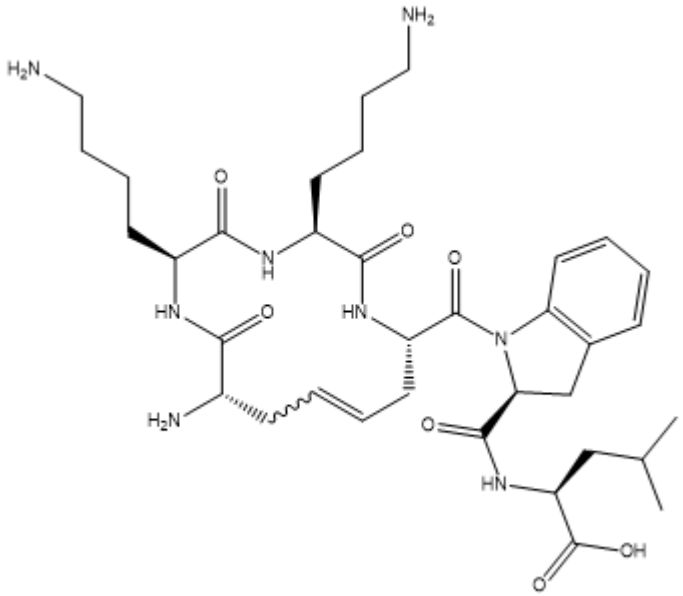
160.	 Chemical Formula $C_{42}H_{60}N_8O_8$ Molecular Weight 804.99
161.	 Chemical Formula $C_{37}H_{58}N_8O_7$ Molecular Weight 726.92

162.	 Chemical Formula $C_{43}H_{60}N_8O_7$ Molecular Weight 801.00
163.	 Chemical Formula $C_{36}H_{56}N_8O_7$ Molecular Weight 712.89

164.	 Chemical Formula $C_{36}H_{56}N_8O_7$ Molecular Weight 712.89
165.	 Chemical Formula $C_{34}H_{55}N_9O_7$ Molecular Weight 701.87

166.	 Chemical Formula $C_{35}H_{60}N_8O_7$ Molecular Weight 704.91
167.	 Chemical Formula $C_{36}H_{56}N_8O_7$ Molecular Weight 712.89

168.	 Chemical Formula $C_{37}H_{56}N_8O_7$ Molecular Weight 756.96
169.	 Chemical Formula $C_{34}H_{55}N_9O_7$ Molecular Weight 701.87

170.	 Chemical Formula $C_{35}H_{54}N_8O_7$ Molecular Weight 698.87

4.5. The compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of claim 1, wherein the compound has a selectivity for the NTS2 receptor higher than 100.

5.6. The compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of claim 1 or 3, wherein:

(iv) R_{10} or R_{11} is the side chain of a phenylalanine, leucine, biphenylalanine, tryptophan, thienylalanine, homotyrosine, tyrosine, benzothienylalanine, furylalanine, styrylalanine, cyclopentylalanine, pyridylalanine, cyclobutylalanine, anthryl-alanine or diphenylalanine; a -CH_2-naphtyl; or a -CH_2-cycloalkyl, wherein the side chain, naphtyl and cycloalkyl is optionally substituted with one or more substituents, each substituent being independently an halogen, hydroxy, amino, trifluoromethyl, cyano, nitro, or a (C1-C5)alkyl; and the other one of R_{10} ~~or~~ and R_{11} is H or CH_3; and/or

(v) R_{13} or R_{14} is a –(CH_2)s-(C3-C7)cycloalkyl or –(CH_2)s-(C4-C7)alkyl wherein s is 1-3; or the side chain of a leucine, tyrosine, phenylalanine, or norleucine, wherein the side chain is optionally substituted with one or more substituents, each substituent being independently an halogen, hydroxy, or alkoxy ~~as defined above~~; and the other one of R_{13} and R_{14} is H or -CH_3.

6.7. The compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of claim 1, wherein the compound is any one of compounds 43, 30, 101, ~~108,~~ 86, 58, 57, 146, 84, 140, 72, 82, 147, 138, 55, 87, 92, 32, 28, 63, 54, 155, 65, 143, 52, 169, 149, 142, 53, 150, 74, 81, 62, 80, 132, 73, 161, 41, 120, 151, 168, ~~109,~~ 167, 77, ~~47,~~

159, 31, 75, 76, 112, 126, 123, 79, 90, 51, 34, 118, 119, 122, 16, 139, 113, 111, 60, 135, 49, 114, 110, 136, ~~153,~~ 93, 166, 117, 115, 131, 66, 162, 134, 116, 78, 129,~~,~~ 89, 91, 130, 137, 128, 64, 68, 156, 67, 133 and 127 as defined above.

~~7.~~8. The compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of claim 1, wherein the compound is any one of compounds 34, 67, 116, 127, 128 and 133 as defined above.

~~8.~~9. A composition comprising (a) the compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof defined in any one of claims 1 to 8; and (b) (i) at least another compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof defined in any one of claims 1 to 8; (ii) an antalgic agent; (iii) an anxiolytic agent; (iv) an antidepressant agent; (v) a pharmaceutically acceptable carrier; or (vi) a combination of at least two of (i) to (v).

~~9.~~10. A kit for preventing or treating pain, comprising (a) the compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof defined in any one of claims 1 to 8; and (b) (i) at least another compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof defined in any one of claims 1 to 8; (ii) another antalgic agent; (iii) an anxiolytic agent; (iv) an antidepressant agent; (v) a pharmaceutically acceptable carrier; (vi) instructions to use the kit in the prevention or treatment of pain or of a symptom thereof; or (vii) a combination of at least two of (i) to (vi).

~~10.~~11. ~~The~~A compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof of any one of claims 1 to 8; or the composition of claim 9 for use in~~A method of~~ preventing or treating pain in a subject in need thereof~~, comprising administering to the subject an effective amount of the compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof defined in claim 1; or of a composition comprising (a) the compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof (b) (i) at least another compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof defined in claim 1; (ii) an antalgic agent; (iii) an anxiolytic agent; (iv) an antidepressant agent; (v) a pharmaceutically acceptable carrier; or (vi) a combination of at least two of (i) to (v)~~.

12. ~~A u~~Use of ~~the~~a compound, stereoisomer, mixture, pharmaceutically acceptable salt, ester or solvate thereof defined in any one of claims 1 to 8; or the composition defined in claim 9 in the manufacture of a medicament for preventing or treating pain in a subject in need thereof.