

849864JXR-seq1-000001
SEQUENCE LISTING

<110> Auckland UniServices Limited
Brimble, Margaret A
Dunbar, Peter R
Williams, Geoffrey M

<120> AMINO ACID AND PEPTIDE CONJUGATES AND CONJUGATION PROCESS

<130> 849864

<150> AU 2016900701
<151> 2016-02-26

<160> 130

<170> PatentIn version 3.5

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Xaa Xaa Xaa Xaa Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln
1 5 10 15

Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
20 25 30

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Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
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<223> Xaa2 is absent or is from one to four hydrophilic amino acids

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Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
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Ser Lys Lys Lys Lys Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr
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Gln Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly
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Leu

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Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp Gln Ser Leu
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Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
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Xaa Xaa Xaa Xaa Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp

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1 5 10 15
 Gly Leu Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His
 20 25 30

Ile Tyr Glu Glu Ala
 35

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Leu Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile
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Tyr Glu Glu Ala
 35

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Xaa	Xaa	Ser	Leu	Tyr	Leu	Gly	Leu	Gln	His	Asp	Gly	Asn	Asp	Gly	Leu
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Pro	Pro	Pro	Pro	Tyr	Ser	Pro	Arg	Asp	Asp	Ser	Ser	Gln	His	Ile	Tyr
			20					25					30		

Glu	Glu	Ala
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Ser	Lys	Lys	Lys	Lys	Ser	Leu	Tyr	Leu	Gly	Leu	Gln	His	Asp	Gly	Asn
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Asp Gly Leu Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln
20 25 30

His Ile Tyr Glu Glu Ala
35

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<400> 10

Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu Pro Pro
1 5 10 15

Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile Tyr Glu Glu
20 25 30

Ala

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<223> Xaa4 is absent or is one or more hydrophilic amino acids

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Xaa	Xaa	Xaa	Xaa	Ser	Asp	Tyr	Gln	Pro	Leu	Gly	Thr	Gln	Asp	Gln	Ser
1				5					10					15	

Leu	Tyr	Leu	Gly	Leu	Gln	His	Asp	Gly	Asn	Asp	Gly	Leu
			20					25				

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<222> (3)..(3)

<223> Xaa3 is absent or is from one to ten hydrophilic amino acids

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Xaa	Xaa	Xaa	Ser	Asp	Tyr	Gln	Pro	Leu	Gly	Thr	Gln	Asp	Gln	Ser	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1 5 10 15

Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
 20 25

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<223> Xaa2 is absent or is from one to four hydrophilic amino acids

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Xaa Xaa Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp Gln Ser Leu Tyr
 1 5 10 15

Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
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<400> 14

Ser Lys Lys Lys Lys Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp Gln
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Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
20 25 30

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<400> 15

Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp Gln Ser Leu Tyr Leu Gly
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Leu Gln His Asp Gly Asn Asp Gly Leu
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Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
20 25 30

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Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile Tyr
 35 40 45

Glu Glu Ala
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 1 5 10 15

Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu Pro
 20 25 30

Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile Tyr Glu
 35 40 45

Glu Ala
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Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu Pro Pro
20 25 30

Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile Tyr Glu Glu
35 40 45

Ala

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Gln Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly
20 25 30

Leu Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile
35 40 45

Tyr Glu Glu Ala
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Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp Gln Ser Leu
1 5 10 15

Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu Pro Pro Pro Pro
20 25 30

Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile Tyr Glu Glu Ala
35 40 45

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Xaa Xaa Xaa Xaa Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys Ser
1 5 10 15

Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe
20 25 30

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Leu Tyr Ala Leu Ala Leu Leu Leu
35 40

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Xaa Xaa Xaa Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys Ser Ser
1 5 10 15

Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu
20 25 30

Tyr Ala Leu Ala Leu Leu Leu
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1 5 10 15

Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr
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Ala Leu Ala Leu Leu Leu
35

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Ser Lys Lys Lys Lys Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys
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Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu
20 25 30

Phe Leu Tyr Ala Leu Ala Leu Leu Leu
35 40

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Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys Ser Ser Cys Ser Ser
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Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu
 20 25 30

Ala Leu Leu Leu
 35

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Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg
 20 25 30

Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
 35 40

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<400> 27

Xaa Xaa Xaa Leu Met Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys
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Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu
20 25 30

Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
35 40

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Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe
20 25 30

Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
35 40

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Ser Lys Lys Lys Lys Leu Met Leu Leu Trp Thr Leu Val Val Leu Leu
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Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala
20 25 30

Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
35 40 45

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Leu Met Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys Ser Ser Cys
1 5 10 15

Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr
20 25 30

Ala Leu Ala Leu Leu Leu Leu Ala
35 40

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Cys	Ser	Ser	Cys	Ser	Ser	Cys	Pro	Leu	Ser	Lys	Ile	Leu	Leu
			20					25				30	

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Xaa	Xaa	Xaa	Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val	Leu	Leu	Ile	Cys
1				5				10					15		

Ser	Ser	Cys	Ser	Ser	Cys	Pro	Leu	Ser	Lys	Ile	Leu	Leu
			20					25				

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<400> 33

Xaa	Xaa	Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val	Leu	Leu	Ile	Cys	Ser
1			5					10						15	

Ser	Cys	Ser	Ser	Cys	Pro	Leu	Ser	Lys	Ile	Leu	Leu
		20					25				

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Ser	Lys	Lys	Lys	Lys	Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val	Leu	Leu
1			5					10						15	

Ile	Cys	Ser	Ser	Cys	Ser	Ser	Cys	Pro	Leu	Ser	Lys	Ile	Leu	Leu
		20					25					30		

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Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val	Leu	Leu	Ile	Cys	Ser	Ser	Cys
1			5					10					15		

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Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu
20 25

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Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu
20 25 30

Leu Leu Ala
35

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<400> 37

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Xaa Xaa Xaa Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser
1 5 10 15

Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu
20 25 30

Leu Ala

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<400> 38

Xaa Xaa Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys
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Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu
20 25 30

Ala

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849864JXR-seq1-000001

<400> 39

Ser Lys Lys Lys Lys Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro
1 5 10 15

Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu
20 25 30

Leu Leu Leu Ala
35

<210> 40

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Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu
1 5 10 15

Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
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<400> 41

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1 5 10 15

Trp Thr Leu Val Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro
20 25 30

Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu
35 40 45

Leu Leu Leu Ala Ser Ala Leu Ile Ala Gly Gly Ser Ile
50 55 60

<210> 42

<211> 60

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<400> 42

Xaa Xaa Xaa Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp
1 5 10 15

Thr Leu Val Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu
20 25 30

Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu
35 40 45

Leu Leu Ala Ser Ala Leu Ile Ala Gly Gly Ser Ile
50 55 60

849864JXR-seq1-000001

<210> 43

<211> 59

<212> PRT

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<222> (1)..(2)

<223> Xaa can be any naturally occurring amino acid

<400> 43

Xaa Xaa Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp Thr
1 5 10 15

Leu Val Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser
20 25 30

Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu
35 40 45

Leu Ala Ser Ala Leu Ile Ala Gly Gly Ser Ile
50 55

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<400> 44

Ser Lys Lys Lys Lys Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu
1 5 10 15

Leu Trp Thr Leu Val Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys
20 25 30

849864JXR-seq1-000001

Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala
 35 40 45

Leu Leu Leu Leu Ala Ser Ala Leu Ile Ala Gly Gly Ser Ile
 50 55 60

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<400> 45

Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp Thr Leu Val
 1 5 10 15

Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile
 20 25 30

Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
 35 40 45

Ser Ala Leu Ile Ala Gly Gly Ser Ile
 50 55

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<223> Xaa can be any naturally occurring amino acid

<400> 46

Xaa Xaa Xaa Xaa Phe Leu Leu Met Leu Leu Trp Thr Leu Val Val Leu
1 5 10 15

Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu
20 25 30

Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala Ser Ala
35 40 45

<210> 47

<211> 47

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(3)

<223> Xaa can be any naturally occurring amino acid

<400> 47

Xaa Xaa Xaa Phe Leu Leu Met Leu Leu Trp Thr Leu Val Val Leu Leu
1 5 10 15

Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala
20 25 30

Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala Ser Ala
35 40 45

<210> 48

<211> 46

<212> PRT

<213> Artificial

849864JXR-seq1-000001

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(2)

<223> Xaa can be any naturally occurring amino acid

<400> 48

Xaa	Xaa	Phe	Leu	Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val	Leu	Leu	Ile
1			5					10					15		

Cys	Ser	Ser	Cys	Ser	Ser	Cys	Pro	Leu	Ser	Lys	Ile	Leu	Leu	Ala	Arg
			20					25					30		

Leu	Phe	Leu	Tyr	Ala	Leu	Ala	Leu	Leu	Leu	Ala	Ser	Ala
		35					40				45	

<210> 49

<211> 49

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 49

Ser	Lys	Lys	Lys	Lys	Phe	Leu	Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val
1				5				10					15		

Leu	Leu	Ile	Cys	Ser	Ser	Cys	Ser	Ser	Cys	Pro	Leu	Ser	Lys	Ile	Leu
			20					25					30		

Leu	Ala	Arg	Leu	Phe	Leu	Tyr	Ala	Leu	Ala	Leu	Leu	Leu	Leu	Ala	Ser
		35					40					45			

Ala

849864JXR-seq1-000001

<210> 50
<211> 44
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 50

Phe Leu Leu Met Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys Ser
1 5 10 15

Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu Ala Arg Leu Phe
20 25 30

Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala Ser Ala
35 40

<210> 51
<211> 55
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<220>
<221> misc_feature
<222> (1)..(4)
<223> Xaa can be any naturally occurring amino acid

<400> 51

Xaa Xaa Xaa Xaa Leu Gln Gly Ile Tyr Val Leu Val Met Leu Val Leu
1 5 10 15

Leu Ile Leu Ala Tyr Arg Arg Arg Trp Arg Arg Leu Thr Val Cys Gly
20 25 30

849864JXR-seq1-000001

Gly Ile Met Phe Leu Ala Cys Val Leu Val Leu Ile Val Asp Ala Val
 35 40 45

Leu Gln Leu Ser Pro Leu Leu
 50 55

<210> 52
 <211> 54
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>
 <221> misc_feature
 <222> (1)..(3)
 <223> Xaa can be any naturally occurring amino acid

<400> 52

Xaa Xaa Xaa Leu Gln Gly Ile Tyr Val Leu Val Met Leu Val Leu Leu
 1 5 10 15

Ile Leu Ala Tyr Arg Arg Arg Trp Arg Arg Leu Thr Val Cys Gly Gly
 20 25 30

Ile Met Phe Leu Ala Cys Val Leu Val Leu Ile Val Asp Ala Val Leu
 35 40 45

Gln Leu Ser Pro Leu Leu
 50

<210> 53
 <211> 53
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(2)

<223> Xaa can be any naturally occurring amino acid

<400> 53

Xaa Xaa Leu Gln Gly Ile Tyr Val Leu Val Met Leu Val Leu Leu Ile
 1 5 10 15

Leu Ala Tyr Arg Arg Arg Trp Arg Arg Leu Thr Val Cys Gly Gly Ile
 20 25 30

Met Phe Leu Ala Cys Val Leu Val Leu Ile Val Asp Ala Val Leu Gln
 35 40 45

Leu Ser Pro Leu Leu
 50

<210> 54

<211> 56

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 54

Ser Lys Lys Lys Lys Leu Gln Gly Ile Tyr Val Leu Val Met Leu Val
 1 5 10 15

Leu Leu Ile Leu Ala Tyr Arg Arg Arg Trp Arg Arg Leu Thr Val Cys
 20 25 30

Gly Gly Ile Met Phe Leu Ala Cys Val Leu Val Leu Ile Val Asp Ala
 35 40 45

Val Leu Gln Leu Ser Pro Leu Leu
 50 55

849864JXR-seq1-000001

<210> 55
<211> 51
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 55

Leu Gln Gly Ile Tyr Val Leu Val Met Leu Val Leu Leu Ile Leu Ala
1 5 10 15

Tyr Arg Arg Arg Trp Arg Arg Leu Thr Val Cys Gly Gly Ile Met Phe
20 25 30

Leu Ala Cys Val Leu Val Leu Ile Val Asp Ala Val Leu Gln Leu Ser
35 40 45

Pro Leu Leu
50

<210> 56
<211> 56
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<220>
<221> misc_feature
<222> (1)..(4)
<223> Xaa can be any naturally occurring amino acid

<400> 56

Xaa Xaa Xaa Xaa Ser Gly Asn Arg Thr Tyr Gly Pro Val Phe Met Cys
1 5 10 15

849864JXR-seq1-000001

Ser Leu Gly Gly Leu Leu Thr Met Val Ala Gly Ala Val Trp Leu Thr
20 25 30

Val Met Ser Asn Thr Leu Leu Ser Ala Trp Ile Leu Thr Ala Gly Phe
35 40 45

Leu Ile Phe Leu Ile Gly Phe Ala
50 55

<210> 57

<211> 55

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(3)

<223> Xaa can be any naturally occurring amino acid

<400> 57

Xaa Xaa Xaa Ser Gly Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Ser
1 5 10 15

Leu Gly Gly Leu Leu Thr Met Val Ala Gly Ala Val Trp Leu Thr Val
20 25 30

Met Ser Asn Thr Leu Leu Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu
35 40 45

Ile Phe Leu Ile Gly Phe Ala
50 55

<210> 58

<211> 54

<212> PRT

<213> Artificial

849864JXR-seq1-000001

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(2)

<223> Xaa can be any naturally occurring amino acid

<400> 58

Xaa	Xaa	Ser	Gly	Asn	Arg	Thr	Tyr	Gly	Pro	Val	Phe	Met	Cys	Ser	Leu
1				5				10						15	

Gly	Gly	Leu	Leu	Thr	Met	Val	Ala	Gly	Ala	Val	Trp	Leu	Thr	Val	Met
		20						25					30		

Ser	Asn	Thr	Leu	Leu	Ser	Ala	Trp	Ile	Leu	Thr	Ala	Gly	Phe	Leu	Ile
		35					40					45			

Phe	Leu	Ile	Gly	Phe	Ala
	50				

<210> 59

<211> 57

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 59

Ser	Lys	Lys	Lys	Lys	Ser	Gly	Asn	Arg	Thr	Tyr	Gly	Pro	Val	Phe	Met
1				5					10					15	

Cys	Ser	Leu	Gly	Gly	Leu	Leu	Thr	Met	Val	Ala	Gly	Ala	Val	Trp	Leu
		20						25					30		

Thr	Val	Met	Ser	Asn	Thr	Leu	Leu	Ser	Ala	Trp	Ile	Leu	Thr	Ala	Gly
		35					40					45			

Phe Leu Ile Phe Leu Ile Gly Phe Ala
50 55

<210> 60
<211> 52
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 60

Ser Gly Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Ser Leu Gly Gly
1 5 10 15

Leu Leu Thr Met Val Ala Gly Ala Val Trp Leu Thr Val Met Ser Asn
20 25 30

Thr Leu Leu Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu Ile Phe Leu
35 40 45

Ile Gly Phe Ala
50

<210> 61
<211> 51
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<220>
<221> misc_feature
<222> (1)..(4)
<223> Xaa can be any naturally occurring amino acid

<400> 61

849864JXR-seq1-000001

Xaa Xaa Xaa Xaa Ser Asn Glu Glu Pro Pro Pro Pro Tyr Glu Asp Pro
1 5 10 15

Tyr Trp Gly Asn Gly Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr
20 25 30

Gln Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly
35 40 45

Leu Pro Pro
50

<210> 62
<211> 50
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<220>
<221> misc_feature
<222> (1)..(3)
<223> Xaa can be any naturally occurring amino acid

<400> 62

Xaa Xaa Xaa Ser Asn Glu Glu Pro Pro Pro Pro Tyr Glu Asp Pro Tyr
1 5 10 15

Trp Gly Asn Gly Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln
20 25 30

Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
35 40 45

Pro Pro
50

849864JXR-seq1-000001

<210> 63

<211> 49

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(2)

<223> Xaa can be any naturally occurring amino acid

<400> 63

Xaa Xaa Ser Asn Glu Glu Pro Pro Pro Pro Tyr Glu Asp Pro Tyr Trp
1 5 10 15

Gly Asn Gly Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp
20 25 30

Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu Pro
35 40 45

Pro

<210> 64

<211> 52

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 64

Ser Lys Lys Lys Lys Ser Asn Glu Glu Pro Pro Pro Pro Tyr Glu Asp
1 5 10 15

Pro Tyr Trp Gly Asn Gly Asp Arg His Ser Asp Tyr Gln Pro Leu Gly
20 25 30

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Thr Gln Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp
 35 40 45

Gly Leu Pro Pro
 50

<210> 65
 <211> 47
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 65

Ser Asn Glu Glu Pro Pro Pro Tyr Glu Asp Pro Tyr Trp Gly Asn
 1 5 10 15

Gly Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp Gln Ser
 20 25 30

Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu Pro Pro
 35 40 45

<210> 66
 <211> 55
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>
 <221> misc_feature
 <222> (1)..(4)
 <223> Xaa can be any naturally occurring amino acid

<400> 66

849864JXR-seq1-000001

Xaa Xaa Xaa Xaa Gly Asn Asp Gly Leu Pro Pro Pro Pro Tyr Ser Pro
1 5 10 15

Arg Asp Asp Ser Ser Gln His Ile Tyr Glu Glu Ala Gly Arg Gly Ser
20 25 30

Met Asn Pro Val Cys Leu Pro Val Ile Val Ala Pro Tyr Leu Phe Trp
35 40 45

Leu Ala Ala Ile Ala Ala Ser
50 55

<210> 67

<211> 54

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(3)

<223> Xaa can be any naturally occurring amino acid

<400> 67

Xaa Xaa Xaa Gly Asn Asp Gly Leu Pro Pro Pro Pro Tyr Ser Pro Arg
1 5 10 15

Asp Asp Ser Ser Gln His Ile Tyr Glu Glu Ala Gly Arg Gly Ser Met
20 25 30

Asn Pro Val Cys Leu Pro Val Ile Val Ala Pro Tyr Leu Phe Trp Leu
35 40 45

Ala Ala Ile Ala Ala Ser
50

849864JXR-seql-000001

<210> 68

<211> 53

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(2)

<223> Xaa can be any naturally occurring amino acid

<400> 68

Xaa Xaa Gly Asn Asp Gly Leu Pro Pro Pro Pro Tyr Ser Pro Arg Asp
1 5 10 15

Asp Ser Ser Gln His Ile Tyr Glu Glu Ala Gly Arg Gly Ser Met Asn
20 25 30

Pro Val Cys Leu Pro Val Ile Val Ala Pro Tyr Leu Phe Trp Leu Ala
35 40 45

Ala Ile Ala Ala Ser
50

<210> 69

<211> 56

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 69

Ser Lys Lys Lys Lys Gly Asn Asp Gly Leu Pro Pro Pro Pro Tyr Ser
1 5 10 15

Pro Arg Asp Asp Ser Ser Gln His Ile Tyr Glu Glu Ala Gly Arg Gly
20 25 30

849864JXR-seq1-000001

Ser Met Asn Pro Val Cys Leu Pro Val Ile Val Ala Pro Tyr Leu Phe
 35 40 45

Trp Leu Ala Ala Ile Ala Ala Ser
 50 55

<210> 70
 <211> 51
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 70

Gly Asn Asp Gly Leu Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser
 1 5 10 15

Ser Gln His Ile Tyr Glu Glu Ala Gly Arg Gly Ser Met Asn Pro Val
 20 25 30

Cys Leu Pro Val Ile Val Ala Pro Tyr Leu Phe Trp Leu Ala Ala Ile
 35 40 45

Ala Ala Ser
 50

<210> 71
 <211> 54
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>
 <221> misc_feature
 <222> (1)..(4)

849864JXR-seq1-000001

<223> Xaa can be any naturally occurring amino acid

<400> 71

Xaa Xaa Xaa Xaa Ala Ala Ile Ala Ala Ser Cys Phe Thr Ala Ser Val
1 5 10 15

Ser Thr Val Val Thr Ala Thr Gly Leu Ala Leu Ser Leu Leu Leu Leu
20 25 30

Ala Ala Val Ala Ser Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu Thr
35 40 45

Pro Val Thr Val Leu Thr
50

<210> 72

<211> 53

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> misc_feature

<222> (1)..(3)

<223> Xaa can be any naturally occurring amino acid

<400> 72

Xaa Xaa Xaa Ala Ala Ile Ala Ala Ser Cys Phe Thr Ala Ser Val Ser
1 5 10 15

Thr Val Val Thr Ala Thr Gly Leu Ala Leu Ser Leu Leu Leu Leu Ala
20 25 30

Ala Val Ala Ser Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu Thr Pro
35 40 45

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Val Thr Val Leu Thr
50

<210> 73
<211> 52
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<220>
<221> misc_feature
<222> (1)..(2)
<223> Xaa can be any naturally occurring amino acid

<400> 73

Xaa Xaa Ala Ala Ile Ala Ala Ser Cys Phe Thr Ala Ser Val Ser Thr
1 5 10 15

Val Val Thr Ala Thr Gly Leu Ala Leu Ser Leu Leu Leu Leu Ala Ala
20 25 30

Val Ala Ser Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu Thr Pro Val
35 40 45

Thr Val Leu Thr
50

<210> 74
<211> 55
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 74

Ser Lys Lys Lys Lys Ala Ala Ile Ala Ala Ser Cys Phe Thr Ala Ser
1 5 10 15

849864JXR-seq1-000001

Val Ser Thr Val Val Thr Ala Thr Gly Leu Ala Leu Ser Leu Leu Leu
20 25 30

Leu Ala Ala Val Ala Ser Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu
35 40 45

Thr Pro Val Thr Val Leu Thr
50 55

<210> 75
<211> 50
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 75

Ala Ala Ile Ala Ala Ser Cys Phe Thr Ala Ser Val Ser Thr Val Val
1 5 10 15

Thr Ala Thr Gly Leu Ala Leu Ser Leu Leu Leu Leu Ala Ala Val Ala
20 25 30

Ser Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu Thr Pro Val Thr Val
35 40 45

Leu Thr
50

<210> 76
<211> 10
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

849864JXR-seq1-000001

<400> 76

Glu Ser Asn Glu Glu Pro Pro Pro Pro Tyr
1 5 10

<210> 77

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 77

Ser Asn Glu Glu Pro Pro Pro Pro Tyr
1 5

<210> 78

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 78

His Ser Asp Tyr Gln Pro Leu Gly Thr
1 5

<210> 79

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 79

Pro Leu Gly Thr Gln Asp Gln Ser Leu
1 5

849864JXR-seq1-000001

<210> 80

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 80

Pro Leu Gly Thr Gln Asp Gln Ser Leu Tyr
1 5 10

<210> 81

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 81

Leu Gly Thr Gln Asp Gln Ser Leu Tyr
1 5

<210> 82

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 82

Gly Thr Gln Asp Gln Ser Leu Tyr Leu
1 5

<210> 83

<211> 9

<212> PRT

<213> Artificial

<220>

849864JXR-seq1-000001

<223> Synthetic peptide sequence

<400> 83

Gly Thr Gln Asp Gln Ser Leu Tyr Leu
1 5

<210> 84

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 84

Gly Thr Gln Asp Gln Ser Leu Tyr Leu Gly
1 5 10

<210> 85

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 85

Gln Ser Leu Tyr Leu Gly Leu Gln His
1 5

<210> 86

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 86

Ser Leu Tyr Leu Gly Leu Gln His Asp
1 5

<210> 87
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 87

Gly Leu Gln His Asp Gly Asn Asp Gly Leu
 1 5 10

<210> 88
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 88

Gly Asn Asp Gly Leu Pro Pro Pro Pro Tyr
 1 5 10

<210> 89
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 89

Gly Leu Pro Pro Pro Pro Tyr Ser Pro
 1 5

<210> 90
 <211> 10
 <212> PRT
 <213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 90

Gly	Leu	Pro	Pro	Pro	Pro	Tyr	Ser	Pro	Arg
1				5					10

<210> 91

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 91

Pro	Arg	Asp	Asp	Ser	Ser	Gln	His	Ile	Tyr
1				5					10

<210> 92

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 92

Arg	Asp	Asp	Ser	Ser	Gln	His	Ile	Tyr
1				5				

<210> 93

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 93

849864JXR-seq1-000001

His Ile Tyr Glu Glu Ala Gly Arg Gly
1 5

<210> 94
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 94

Ile Leu Leu Ala Arg Leu Phe Leu Tyr
1 5

<210> 95
<211> 11
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 95

Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile
1 5 10

<210> 96
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 96

Leu Leu Trp Thr Leu Val Val Leu Leu
1 5

<210> 97
<211> 9

849864JXR-seq1-000001

<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 97

Phe Leu Tyr Ala Leu Ala Leu Leu Leu
1 5

<210> 98
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 98

Cys Leu Gly Gly Leu Leu Thr Met Val
1 5

<210> 99
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 99

Leu Ile Val Asp Ala Val Leu Gln Leu
1 5

<210> 100
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 100

Leu Thr Ala Gly Phe Leu Ile Phe Leu
1 5

<210> 101

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 101

Thr Val Cys Gly Gly Ile Met Phe Leu
1 5

<210> 102

<211> 42

<212> PRT

<213> artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa2 is absent or is a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa3 is absent or is a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (4)..(4)

<223> Xaa4 is absent or is one or more hydrophilic amino acids

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<400> 102

Xaa Xaa Xaa Xaa Gly Ala Arg Gly Pro Glu Ser Arg Leu Leu Glu Phe
1 5 10 15

Tyr Leu Ala Met Pro Phe Ala Thr Pro Met Glu Ala Glu Leu Ala Arg
20 25 30

Arg Ser Leu Ala Gln Asp Ala Pro Pro Leu
35 40

<210> 103

<211> 41

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa2 is absent or is a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa3 is absent or is from one to ten hydrophilic amino acids

<400> 103

Xaa Xaa Xaa Gly Ala Arg Gly Pro Glu Ser Arg Leu Leu Glu Phe Tyr
1 5 10 15

Leu Ala Met Pro Phe Ala Thr Pro Met Glu Ala Glu Leu Ala Arg Arg
20 25 30

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Ser Leu Ala Gln Asp Ala Pro Pro Leu
35 40

<210> 104
<211> 40
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa1 is absent or is S

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa2 is absent or is from one to four hydrophilic amino acids

<400> 104

Xaa Xaa Gly Ala Arg Gly Pro Glu Ser Arg Leu Leu Glu Phe Tyr Leu
1 5 10 15

Ala Met Pro Phe Ala Thr Pro Met Glu Ala Glu Leu Ala Arg Arg Ser
20 25 30

Leu Ala Gln Asp Ala Pro Pro Leu
35 40

<210> 105
<211> 43
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 105

849864JXR-seq1-000001

Ser Lys Lys Lys Lys Gly Ala Arg Gly Pro Glu Ser Arg Leu Leu Glu
1 5 10 15

Phe Tyr Leu Ala Met Pro Phe Ala Thr Pro Met Glu Ala Glu Leu Ala
20 25 30

Arg Arg Ser Leu Ala Gln Asp Ala Pro Pro Leu
35 40

<210> 106

<211> 38

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 106

Gly Ala Arg Gly Pro Glu Ser Arg Leu Leu Glu Phe Tyr Leu Ala Met
1 5 10 15

Pro Phe Ala Thr Pro Met Glu Ala Glu Leu Ala Arg Arg Ser Leu Ala
20 25 30

Gln Asp Ala Pro Pro Leu
35

<210> 107

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 107

Leu Ala Met Pro Phe Ala Thr Pro Met
1 5

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<210> 108
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 108

Phe Ala Thr Pro Met Glu Ala Glu Leu
1 5

<210> 109
<211> 30
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

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<223> Xaa1 is absent or is S

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<222> (2)..(2)
<223> Xaa2 is absent or is a hydrophilic amino acid

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<222> (3)..(3)
<223> Xaa3 is absent or is a hydrophilic amino acid

<220>
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<222> (4)..(4)
<223> Xaa4 is absent or is one or more hydrophilic amino acids

<400> 109

Xaa Xaa Xaa Xaa Val Pro Gly Val Leu Leu Lys Glu Phe Thr Val Ser
1 5 10 15

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Gly Asn Ile Leu Thr Ile Arg Leu Thr Ala Ala Asp His Arg
 20 25 30

<210> 110
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<220>
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 <223> Xaa1 is absent or is S

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 <222> (2)..(2)
 <223> Xaa2 is absent or is a hydrophilic amino acid

<220>
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 <222> (3)..(3)
 <223> Xaa3 is absent or is from one to ten hydrophilic amino acids

<400> 110

Xaa Xaa Xaa Val Pro Gly Val Leu Leu Lys Glu Phe Thr Val Ser Gly
 1 5 10 15

Asn Ile Leu Thr Ile Arg Leu Thr Ala Ala Asp His Arg
 20 25

<210> 111
 <211> 28
 <212> PRT
 <213> Artificial

<220>
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<220>

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<222> (1)..(1)

<223> Xaa1 is absent or is S

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa2 is absent or is from one to four hydrophilic amino acids

<400> 111

Xaa	Xaa	Val	Pro	Gly	Val	Leu	Leu	Lys	Glu	Phe	Thr	Val	Ser	Gly	Asn
1				5					10					15	

Ile	Leu	Thr	Ile	Arg	Leu	Thr	Ala	Ala	Asp	His	Arg
			20				25				

<210> 112

<211> 31

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 112

Ser	Lys	Lys	Lys	Lys	Val	Pro	Gly	Val	Leu	Leu	Lys	Glu	Phe	Thr	Val
1				5					10					15	

Ser	Gly	Asn	Ile	Leu	Thr	Ile	Arg	Leu	Thr	Ala	Ala	Asp	His	Arg
			20					25					30	

<210> 113

<211> 26

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 113

849864JXR-seq1-000001

Val Pro Gly Val Leu Leu Lys Glu Phe Thr Val Ser Gly Asn Ile Leu
1 5 10 15

Thr Ile Arg Leu Thr Ala Ala Asp His Arg
20 25

<210> 114
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 114

Glu Phe Thr Val Ser Gly Asn Ile Leu
1 5

<210> 115
<211> 32
<212> PRT
<213> Artificial

<220>
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<222> (2)..(2)
<223> Xaa2 is absent or is a hydrophilic amino acid

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<222> (3)..(3)
<223> Xaa3 is absent or is a hydrophilic amino acid

<220>
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<222> (4)..(4)

<223> Xaa4 is absent or is one or more hydrophilic amino acids

<400> 115

Xaa	Xaa	Xaa	Xaa	Leu	Gln	Gln	Leu	Ser	Leu	Leu	Met	Trp	Ile	Thr	Gln
1				5				10						15	

Cys	Phe	Leu	Pro	Val	Phe	Leu	Ala	Gln	Pro	Pro	Ser	Gly	Gln	Arg	Arg
			20					25					30		

<210> 116

<211> 31

<212> PRT

<213> Artificial

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<223> Synthetic peptide sequence

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<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S

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<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa2 is absent or is a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa3 is absent or is from one to ten hydrophilic amino acids

<400> 116

Xaa	Xaa	Xaa	Leu	Gln	Gln	Leu	Ser	Leu	Leu	Met	Trp	Ile	Thr	Gln	Cys
1				5				10						15	

Phe	Leu	Pro	Val	Phe	Leu	Ala	Gln	Pro	Pro	Ser	Gly	Gln	Arg	Arg
			20					25					30	

<210> 117

849864JXR-seq1-000001

<211> 30

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<222> (1)..(1)

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<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa2 is absent or is from one to four hydrophilic amino acids

<400> 117

Xaa Xaa Leu Gln Gln Leu Ser Leu Leu Met Trp Ile Thr Gln Cys Phe
1 5 10 15

Leu Pro Val Phe Leu Ala Gln Pro Pro Ser Gly Gln Arg Arg
20 25 30

<210> 118

<211> 33

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 118

Ser Lys Lys Lys Lys Leu Gln Gln Leu Ser Leu Leu Met Trp Ile Thr
1 5 10 15

Gln Cys Phe Leu Pro Val Phe Leu Ala Gln Pro Pro Ser Gly Gln Arg
20 25 30

Arg

<210> 119
 <211> 28
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 119

Leu Gln Gln Leu Ser Leu Leu Met Trp Ile Thr Gln Cys Phe Leu Pro
 1 5 10 15

Val Phe Leu Ala Gln Pro Pro Ser Gly Gln Arg Arg
 20 25

<210> 120
 <211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 120

Ser Leu Leu Met Trp Ile Thr Gln Cys Phe Leu Pro Val Phe
 1 5 10

<210> 121
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 121

Ser Leu Leu Met Trp Ile Thr Gln Cys
 1 5

849864JXR-seq1-000001

<210> 122

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 122

Asn Leu Val Pro Met Val Ala Thr Val

1

5

<210> 123

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 123

Cys Ser Lys Lys Lys Lys Asn Leu Val Pro Cys Val Ala Thr Val

1

5

10

15

<210> 124

<211> 35

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

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<222> (1)..(1)

<223> Xaa1 is absent or is S

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa2 is absent or is a hydrophilic amino acid

<220>

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<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa3 is absent or is a hydrophilic amino acid

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<221> MISC_FEATURE

<222> (4)..(4)

<223> Xaa4 is absent or is one or more hydrophilic amino acids

<400> 124

Xaa Xaa Xaa Xaa Lys Ile Ser Gln Ala Val His Ala Ala His Ala Glu
1 5 10 15

Ile Asn Glu Ala Gly Arg Glu Ser Ile Ile Asn Phe Glu Lys Leu Thr
20 25 30

Glu Trp Thr
35

<210> 125

<211> 34

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

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<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S

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<222> (2)..(2)

<223> Xaa2 is absent or is a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa3 is absent or is from one to ten hydrophilic amino acids

<400> 125

849864JXR-seq1-000001

Xaa Xaa Xaa Lys Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile
1 5 10 15

Asn Glu Ala Gly Arg Glu Ser Ile Ile Asn Phe Glu Lys Leu Thr Glu
20 25 30

Trp Thr

<210> 126
<211> 33
<212> PRT
<213> Artificial

<220>
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<220>
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<222> (1)..(1)
<223> Xaa1 is absent or is S

<220>
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<222> (2)..(2)
<223> Xaa2 is absent or is from one to four hydrophilic amino acids

<400> 126

Xaa Xaa Lys Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile Asn
1 5 10 15

Glu Ala Gly Arg Glu Ser Ile Ile Asn Phe Glu Lys Leu Thr Glu Trp
20 25 30

Thr

<210> 127
<211> 36

849864JXR-seq1-000001

<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 127

Ser Lys Lys Lys Lys Lys Ile Ser Gln Ala Val His Ala Ala His Ala
1 5 10 15

Glu Ile Asn Glu Ala Gly Arg Glu Ser Ile Ile Asn Phe Glu Lys Leu
20 25 30

Thr Glu Trp Thr
35

<210> 128
<211> 31
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 128

Lys Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile Asn Glu Ala
1 5 10 15

Gly Arg Glu Ser Ile Ile Asn Phe Glu Lys Leu Thr Glu Trp Thr
20 25 30

<210> 129
<211> 8
<212> PRT
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<220>
<223> Synthetic peptide sequence

<400> 129

849864JXR-seq1-000001

Ser Ile Ile Asn Phe Glu Lys Leu
1 5

<210> 130

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 130

Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile Asn Glu Ala Gly
1 5 10 15

Arg