

SEQUENCE LISTING

<110> Auckland Uniservices Limited
 <120> PEPTIDE CONJUGATES, CONJUGATION PROCESS AND USES THEREOF
 <130> 835422
 <160> 139
 <170> PatentIn version 3.5
 <210> 1
 <211> 32
 <212> PRT
 <213> Artificial
 <220>
 <223> Synthetic peptide sequence
 <220>
 <221> MISC_FEATURE
 <222> (1)..(1)
 <223> Xaa1 is absent or is S or a hydrophilic amino acid
 <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
 <220>
 <221> MISC_FEATURE
 <222> (17)..(17)
 <223> Xaa22 is any naturally occurring amino acid except C
 <400> 1
 Xaa Xaa Xaa Xaa Leu Gln Gln Leu Ser Leu Leu Met Trp Ile Thr Gln
 1 5 10 15

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

<210> 2
 <211> 31
 <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

<220>
 <221> MISC_FEATURE
 <222> (16)..(16)
 <223> Xaa22 is any naturally occurring amino acid except C

<400> 2

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

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

<210> 3
 <211> 30
 <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

<220>
 <221> MISC_FEATURE
 <222> (15)..(15)
 <223> Xaa22 is any naturally occurring amino acid except C

<400> 3

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

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

<210> 4
 <211> 33
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>
 <221> MISC_FEATURE
 <222> (18)..(18)
 <223> Xaa22 is any naturally occurring amino acid except C

<400> 4

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

Gln	Xaa	Phe	Leu	Pro	Val	Phe	Leu	Ala	Gln	Pro	Pro	Ser	Gly	Gln	Arg
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

20

25

30

Arg

<210> 5

<211> 28

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (13)..(13)

<223> Xaa22 is any naturally occurring amino acid except C

<400> 5

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

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

<210> 6

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (9)..(9)

<223> Xaa22 is any naturally occurring amino acid except C

<400> 6

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

<210> 7
 <211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>
 <221> MISC_FEATURE
 <222> (14)..(14)
 <223> Xaa22 is any naturally occurring amino acid except C

<400> 7

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

<210> 8
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>
 <221> MISC_FEATURE
 <222> (9)..(9)
 <223> Xaa22 is any naturally occurring amino acid except C

<400> 8

Ser Leu Leu Met Trp Ile Thr Gln Xaa
 1 5

<210> 9
 <211> 32
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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

<400> 9

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		

<210> 10
 <211> 28
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 10

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
			20					25			

<210> 11
 <211> 30
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

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

<400> 11

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

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

<210> 12
 <211> 33
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 12

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

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

Leu

<210> 13

<211> 28

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 13

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
20 25

<210> 14

<211> 37

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 14

Xaa	Xaa	Xaa	Xaa	Ser	Leu	Tyr	Leu	Gly	Leu	Gln	His	Asp	Gly	Asn	Asp
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

<210> 15

<211> 36

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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> 15

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

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

Tyr Glu Glu Ala
35

<210> 16

<211> 35

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 16

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

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

Glu Glu Ala
35

<210> 17

<211> 38

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 17

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

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

<210> 18

<211> 33

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 18

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

<210> 19

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

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

<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

<400> 19

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				

<210> 20
 <211> 28
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 20

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			

<210> 21
 <211> 27
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> Xaa2 is absent or is a hydrophilic amino acid

<400> 21

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
			20					25		

<210> 22
 <211> 30
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 22

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

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

<210> 23

<211> 25

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 23

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

Leu Gln His Asp Gly Asn Asp Gly Leu
20 25

<210> 24

<211> 51

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 24

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		

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

Glu	Glu	Ala
		50

<210> 25
 <211> 50
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 25

Xaa Xaa Xaa Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln Asp
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
50

<210> 26

<211> 49

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 26

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

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

<210> 27
 <211> 52
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 27

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

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
 50

<210> 28
 <211> 47
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 28

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

<210> 29
 <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 or a hydrophilic amino acid

<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

<400> 29

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

Leu Tyr Ala Leu Ala Leu Leu Leu
 35 40

<210> 30
 <211> 39
 <212> PRT
 <213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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> 30

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
				35		

<210> 31

<211> 38

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 31

Xaa Xaa 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
35

<210> 32

<211> 41

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 32

Ser Lys Lys Lys Lys 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 Ala Arg Leu
20 25 30

Phe Leu Tyr Ala Leu Ala Leu Leu Leu
35 40

<210> 33

<211> 36

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 33

Leu Leu Trp Thr Leu Val Val Leu Leu Ile Cys Ser Ser Cys Ser Ser

1 5 10 15

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

20 25 30

Ala Leu Leu Leu

35

<210> 34

<211> 44

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 34

Xaa Xaa Xaa Xaa 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 Leu Ala
 35 40

<210> 35
 <211> 43
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 35

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 Ala Arg Leu
 20 25 30

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

<210> 36
 <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 or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 36

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	Ala	Arg	Leu	Phe
			20					25					30		

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

<210> 37

<211> 45

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 37

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	Ala
			20					25					30		

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

<210> 38

<211> 40

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 38

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

<210> 39

<211> 30

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 39

Xaa Xaa Xaa Xaa 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
 20 25 30

<210> 40

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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> 40

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

<210> 41

<211> 28

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 41

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			

<210> 42

<211> 31

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 42

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	

<210> 43

<211> 26

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 43

Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val	Leu	Leu	Ile	Cys	Ser	Ser	Cys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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

<210>	44
<211>	35
<212>	PRT
<213>	Artificial

<220>
<223> Synthetic peptide sequence

```
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa1 is absent or is S or a hydrophilic amino acid
```

```
<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
```

<400> 44

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

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

Leu Leu Ala
35

<210> 45
 <211> 34
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 45

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

<210> 46
 <211> 33
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>
 <221> MISC_FEATURE
 <222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 46

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

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

Ala

<210> 47

<211> 36

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 47

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> 48

<211> 31

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 48

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
20 25 30

<210> 49

<211> 57

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 49

Xaa Xaa Xaa Xaa Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu Leu
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
 50 55

<210> 50
 <211> 56
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 50

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
 50 55

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

<220>
 <223> Synthetic peptide sequence

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

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

<400> 51

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
 50 55

<210> 52
 <211> 62
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 52

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

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

<210> 53

<211> 57

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 53

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

<210> 54

<211> 48

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)
 <223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 54

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> 55
 <211> 47
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 55

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> 56
 <211> 46
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

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

<400> 56

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 Leu Ala Ser Ala

35

40

45

<210> 57

<211> 49

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 57

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

<210> 58

<211> 44

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 58

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> 59
 <211> 55
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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

<400> 59

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			

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> 60
 <211> 54

<212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 60

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> 61
 <211> 53
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 61

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> 62

<211> 56

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 62

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

<210> 63
 <211> 51
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 63

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> 64
 <211> 56
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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

<400> 64

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

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> 65
 <211> 55
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 65

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> 66

<211> 54

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 66

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> 67

<211> 57

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 67

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> 68

<211> 52

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 68

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> 69

<211> 51

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 69

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> 70
<211> 50
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

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

<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> 70

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

<210> 71
<211> 49
<212> PRT
<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 71

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> 72

<211> 52

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 72

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		

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> 73
 <211> 47
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 73

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

<220>
 <223> Synthetic peptide sequence

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

<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

<400> 74

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> 75
 <211> 54
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 75

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

<210> 76

<211> 53

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 76

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> 77

<211> 56

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 77

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

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> 78

<211> 51

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 78

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>	79
<211>	54
<212>	PRT
<213>	Artificial

<220>
<223> Synthetic peptide sequence

```
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa1 is absent or is S or a hydrophilic amino acid
```

```
<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
```

<400> 79

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> 80
<211> 53
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

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

<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> 80

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

Val Thr Val Leu Thr
50

<210> 81
<211> 52

<212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

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

<400> 81

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> 82
 <211> 55
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 82

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

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> 83
 <211> 50
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 83

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> 84
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 84

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

<210> 85
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 85

Ser Asn Glu Glu Pro Pro Pro Pro Tyr
 1 5

<210> 86
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 86

His Ser Asp Tyr Gln Pro Leu Gly Thr
 1 5

<210> 87
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 87

Pro Leu Gly Thr Gln Asp Gln Ser Leu
 1 5

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

<220>
 <223> Synthetic peptide sequence

<400> 88

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

<210> 89

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 89

Leu Gly Thr Gln Asp Gln Ser Leu Tyr
1 5

<210> 90

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 90

Gly Thr Gln Asp Gln Ser Leu Tyr Leu
1 5

<210> 91

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 91

Gly Thr Gln Asp Gln Ser Leu Tyr Leu
1 5

<210> 92

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

<220>
 <223> Synthetic peptide sequence

<400> 92

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

<210> 93
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 93

Gln Ser Leu Tyr Leu Gly Leu Gln His
 1 5

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

<220>
 <223> Synthetic peptide sequence

<400> 94

Ser Leu Tyr Leu Gly Leu Gln His Asp
 1 5

<210> 95
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 95

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

<210> 96
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 96

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

<210> 97
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 97

Gly Leu Pro Pro Pro Pro Tyr Ser Pro
 1 5

<210> 98
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 98

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

<210> 99
 <211> 10
 <212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 99

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

<210> 100

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 100

Arg	Asp	Asp	Ser	Ser	Gln	His	Ile	Tyr
1				5				

<210> 101

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 101

His	Ile	Tyr	Glu	Glu	Ala	Gly	Arg	Gly
1				5				

<210> 102

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 102

Ile Leu Leu Ala Arg Leu Phe Leu Tyr

1 5

<210> 103
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 103

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

<210> 104
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 104

Leu Leu Trp Thr Leu Val Val Leu Leu
 1 5

<210> 105
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 105

Phe Leu Tyr Ala Leu Ala Leu Leu Leu
 1 5

<210> 106
 <211> 9
 <212> PRT
 <213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 106

Cys Leu Gly Gly Leu Leu Thr Met Val
1 5

<210> 107

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 107

Leu Ile Val Asp Ala Val Leu Gln Leu
1 5

<210> 108

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 108

Leu Thr Ala Gly Phe Leu Ile Phe Leu
1 5

<210> 109

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 109

Thr Val Cys Gly Gly Ile Met Phe Leu
1 5

<210> 110
 <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 or a hydrophilic amino acid

<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

<400> 110

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> 111
 <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 or a hydrophilic amino acid

<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> 111

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			

Ser	Leu	Ala	Gln	Asp	Ala	Pro	Pro	Leu
		35				40		

<210> 112

<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 or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 112

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> 113

<211> 43

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 113

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> 114

<211> 38

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 114

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> 115
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 115

Leu Ala Met Pro Phe Ala Thr Pro Met
 1 5

<210> 116
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 116

Phe Ala Thr Pro Met Glu Ala Glu Leu
 1 5

<210> 117
 <211> 30
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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

 <400> 117

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

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

<210> 118
 <211> 29
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 118

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> 119

<211> 28

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 119

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> 120

<211> 31

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 120

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> 121
<211> 26
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 121

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> 122
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<400> 122

Glu Phe Thr Val Ser Gly Asn Ile Leu
1 5

<210> 123
<211> 32
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide sequence

<220>
<221> MISC_FEATURE

<222> (1)..(1)
 <223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 123

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> 124
 <211> 31
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 124

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> 125

<211> 30

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 125

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> 126

<211> 33

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 126

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> 127
 <211> 28
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 127

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> 128
 <211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<400> 128

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

<210> 129
 <211> 9
 <212> PRT
 <213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 129

Ser Leu Leu Met Trp Ile Thr Gln Cys

1 5

<210> 130

<211> 35

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<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

<400> 130

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> 131
 <211> 34
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

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

<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> 131

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> 132
 <211> 33
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa1 is absent or is S or a hydrophilic amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

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

<400> 132

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> 133

<211> 36

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 133

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> 134

<211> 31

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 134

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> 135

<211> 8

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 135

Ser	Ile	Ile	Asn	Phe	Glu	Lys	Leu
1				5			

<210> 136

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 136

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

Arg

<210> 137

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 137

Asn Leu Val Pro Met Val Ala Thr Val

1 5

<210> 138

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 138

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

1 5 10 15

<210> 139

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide sequence

<400> 139

Ser Lys Lys Lys Lys Ser Leu Leu Met Trp Ile Thr Gln Val

1 5 10