

pctnl2015050235-seq1
SEQUENCE LISTING

<110> Stichting VU-VUmc

<120> Immunoglobulins binding human Vgamma9 Vdelta2 T cell receptors

<130> P31885PC00

<160> 72

<170> PatentIn version 3.5

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<212> PRT

<213> Llama glama

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Gly Arg Thr Phe Ser Arg Tyr Thr Met Gly
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Ala Ile Ser Trp Ser Gly Gly Arg Thr Asn Phe Ala Gly Ser Val Lys
1 5 10 15

Gly

<210> 3

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<212> PRT

<213> Llama glama

<400> 3

Asp Trp Leu Pro Val Pro Gly Arg Glu Ser Tyr Asp Tyr
1 5 10

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Gly Arg Thr Phe Ser Ser Tyr Ala Met Gly
1 5 10

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Ala Ile Ser Trp Ser Gly Gly Thr Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

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

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Gly Arg Thr Phe Ser Glu Tyr Ala Met Gly
1 5 10

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<210> 8
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Ala	Ile	Ser	Trp	Thr	Gly	Ser	Lys	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	Lys
1				5				10						15	

Gly

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Ser	Ser	Asp	Cys	Ser	Gly	Pro	Gly	Cys	His	Thr	Glu	Glu	Tyr	Asp	Tyr
1				5				10						15	

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Ala	Val	Ser	Trp	Ser	Gly	Gly	Ser	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	Lys
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Gly

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Ser Gln Asp Cys Ser Gly Pro Gly Cys Tyr Thr Asn Glu Tyr Asp Ser
1 5 10 15

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<400> 12

Gly Ser Ile Phe Ser Asn Tyr Ala Met Ala
1 5 10

<210> 13
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<213> Llama glama

<400> 13

Ala Val Ser Trp Ser Gly Gly Arg Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 14
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<213> Llama glama

<400> 14

Ser Leu Ser Cys Ser Gly Pro Gly Cys Ser Leu Glu Glu Tyr Asp Tyr
1 5 10 15

<210> 15
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<213> Llama glama

<400> 15

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Gly Arg Pro Phe Ser Asn Tyr Ala Met Gly
1 5 10

<210> 16
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<213> Llama glama

<400> 16

Val Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 17
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<400> 17

Gln Phe Ser Gly Ala Ser Thr Val Val Ala Gly Thr Ala Leu Asp Tyr
1 5 10 15

Asp Tyr

<210> 18
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<213> Llama glama

<400> 18

Gly Arg Pro Phe Ser Asn Tyr Gly Met Gly
1 5 10

<210> 19
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<212> PRT

<213> Llama glama

<400> 19

Gly	Ile	Ser	Trp	Ser	Gly	Gly	Ser	Thr	Asp	Tyr	Ala	Asp	Ser	Val	Lys
1				5					10					15	

Gly

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Val	Phe	Ser	Gly	Ala	Glu	Thr	Ala	Tyr	Tyr	Pro	Ser	Asp	Asp	Tyr	Asp
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Tyr

<210> 21

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<213> Llama glama

<400> 21

Gly	Ile	Thr	Trp	Ser	Gly	Gly	Ser	Thr	His	Tyr	Ala	Asp	Leu	Val	Lys
1				5					10					15	

Gly

<210> 22

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<213> Llama glama

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<400> 22

Val Phe Ser Gly Ala Glu Thr Ala Tyr Tyr Pro Ser Thr Glu Tyr Asp
1 5 10 15

Tyr

<210> 23

<211> 10

<212> PRT

<213> Llama glama

<400> 23

Gly Arg Pro Phe Asn Asn Tyr Gly Met Gly
1 5 10

<210> 24

<211> 17

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<213> Llama glama

<400> 24

Gly Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 25

<211> 17

<212> PRT

<213> Llama glama

<400> 25

Val Phe Ser Gly Ala Glu Thr Ala Gln Tyr Pro Ser Tyr Asp Tyr Asp
1 5 10 15

Tyr

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<210> 26
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<400> 26

Ala Val Thr Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 27
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<400> 27

Gln Phe Asn Gly Ala Glu Asn Ile Val Pro Ala Thr Thr Thr Pro Thr
1 5 10 15

Ser Tyr Asp Tyr
20

<210> 28
<211> 17
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<213> Llama glama

<400> 28

Ala Ile Ser Trp Ser Gly Gly Ser Thr Ser Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

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<210> 29
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 <213> Llama glama

<400> 29

Gln	Phe	Ser	Gly	Ala	Asp	Tyr	Gly	Phe	Gly	Arg	Leu	Gly	Ile	Arg	Gly
1				5					10					15	

Tyr	Glu	Tyr	Asp	Tyr
			20	

<210> 30
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 <213> Llama glama

<400> 30

Gln	Phe	Ser	Gly	Ala	Asp	Tyr	Gly	Phe	Gly	Arg	Leu	Gly	Ile	Gln	Gly
1				5					10					15	

Tyr	Glu	Tyr	Asp	Tyr
			20	

<210> 31
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<400> 31

Gly	Arg	Thr	Phe	Ser	Asn	Tyr	Ala	Met	Gly
1				5					10

<210> 32
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 <213> Llama glama

<400> 32

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Ala Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 33
<211> 21
<212> PRT
<213> Llama glama

<400> 33

Met Phe Ser Gly Ser Glu Ser Gln Leu Val Val Val Ile Thr Asn Leu
1 5 10 15

Tyr Glu Tyr Asp Tyr
20

<210> 34
<211> 17
<212> PRT
<213> Llama glama

<400> 34

Thr Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 35
<211> 18
<212> PRT
<213> Llama glama

<400> 35

Ala Phe Ser Gly Ser Asp Tyr Ala Asn Thr Lys Lys Glu Val Glu Tyr
1 5 10 15

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Asp Tyr

<210> 36
<211> 17
<212> PRT
<213> Llama glama

<400> 36

Ala	Ile	Ser	Trp	Ser	Gly	Gly	Met	Thr	Asp	His	Ala	Asp	Ser	Val	Lys
1				5					10					15	

Gly

<210> 37
<211> 21
<212> PRT
<213> Llama glama

<400> 37

Ala	Phe	Ala	Gly	Asp	Ile	Pro	Tyr	Gly	Ser	Ser	Trp	Tyr	Gly	Asp	Pro
1				5					10					15	

Thr	Thr	Tyr	Asp	Tyr
			20	

<210> 38
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<213> Llama glama

<400> 38

Gly	Arg	Thr	Ser	Ser	Thr	Phe	Ser	Met	Ala
1				5					10

<210> 39
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<212> PRT

<213> Llama glama

<400> 39

Ala	Ile	Asn	Trp	Ser	Gly	Gly	Ser	Thr	Arg	Tyr	Ala	Asp	Ser	Val	Ser
1				5					10					15	

Asp

<210> 40

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<212> PRT

<213> Llama glama

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Arg	Arg	Gly	Gly	Ile	Tyr	Tyr	Ser	Thr	Gln	Asn	Asp	Tyr	Asp	Tyr
1				5					10					15

<210> 41

<211> 10

<212> PRT

<213> Llama glama

<400> 41

Val	Arg	Thr	Phe	Ser	Asp	Tyr	Arg	Met	Gly
1				5					10

<210> 42

<211> 17

<212> PRT

<213> Llama glama

<400> 42

Thr	Ile	Ser	Trp	Ser	Gly	Gly	Leu	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	Lys
1				5					10					15	

Gly

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<210> 43
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<400> 43

Gly	Gly	Gly	Tyr	Ala	Gly	Gly	Thr	Tyr	Tyr	His	Pro	Glu	Glu
1				5					10				

<210> 44
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 <212> PRT
 <213> Llama glama

<400> 44

Gly	Phe	Thr	Phe	Asp	Asp	Tyr	Cys	Ile	Ala
1				5					10

<210> 45
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 <213> Llama glama

<400> 45

Cys	Ile	Thr	Thr	Ser	Asp	Gly	Ser	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	Lys
1				5					10					15	

Gly

<210> 46
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 <213> Llama glama

<400> 46

Tyr	Phe	Gly	Tyr	Gly	Cys	Tyr	Gly	Gly	Ala	Gln	Asp	Tyr	Arg	Ala	Met
1				5					10					15	

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Asp Tyr

<210> 47
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 <212> PRT
 <213> Llama glama

<400> 47

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Arg Tyr
 20 25 30

Thr Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Ala Ile Ser Trp Ser Gly Gly Arg Thr Asn Phe Ala Gly Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Asp Trp Leu Pro Val Pro Gly Arg Glu Ser Tyr Asp Tyr Trp
 100 105 110

Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 48
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<213> Llama glama

<400> 48

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Ser Trp Ser Gly Gly Thr Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Ser
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95

Ala Ala Ser Leu Asp Cys Ser Gly Pro Gly Cys His Thr Ala Glu Tyr
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 49

<211> 125

<212> PRT

<213> Llama glama

<400> 49

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Thr Gly Arg Thr Phe Ser Glu Tyr

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20

25

30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Ala
35 40 45

Ala Ala Ile Ser Trp Thr Gly Ser Lys Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Ser Ser Asp Cys Ser Gly Pro Gly Cys His Thr Glu Glu Tyr
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 50
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<212> PRT
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<400> 50

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Val Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Asn Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Ser Gln Asp Cys Ser Gly Pro Gly Cys Tyr Thr Asn Glu Tyr
100 105 110

Asp Ser Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 51
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<212> PRT
<213> Llama glama

<400> 51

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Ile Phe Ser Asn Tyr
20 25 30

Ala Met Ala Trp Phe Arg Gln Ala Pro Glu Lys Glu Arg Asp Phe Leu
35 40 45

Ala Ala Val Ser Trp Ser Gly Gly Arg Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Asn
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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Ala Ala Ser Leu Ser Cys Ser Gly Pro Gly Cys Ser Leu Glu Glu Tyr
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 52
<211> 127
<212> PRT
<213> Llama glama

<400> 52

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Pro Phe Ser Asn Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Thr Val Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Gln Phe Ser Gly Ala Ser Thr Val Val Ala Gly Thr Ala Leu
100 105 110

Asp Tyr Asp Tyr Trp Gly Gln Gly Thr Arg Val Thr Val Ser Ser
115 120 125

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<210> 53
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<400> 53

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Pro Phe Ser Asn Tyr
 20 25 30

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Lys Arg Glu Phe Val
 35 40 45

Ala Gly Ile Ser Trp Ser Gly Gly Ser Thr Asp Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Leu Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Val Phe Ser Gly Ala Glu Thr Ala Tyr Tyr Pro Ser Asp Asp
 100 105 110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120 125

<210> 54
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<400> 54

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Pro Phe Ser Asn Tyr
20 25 30

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Lys Arg Glu Phe Val
35 40 45

Ala Gly Ile Ser Trp Ser Gly Gly Ser Thr Asp Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Val Phe Ser Gly Ala Glu Thr Ala Tyr Tyr Pro Ser Asp Asp
100 105 110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 55
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<212> PRT
<213> Llama glama

<400> 55

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Pro Phe Ser Asn Tyr
20 25 30

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Lys Arg Glu Ser Val
35 40 45

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Ala Gly Ile Ser Trp Ser Gly Gly Ser Thr Asp Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Val Phe Ser Gly Ala Glu Thr Ala Tyr Tyr Pro Ser Asp Asp
100 105 110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 56
<211> 126
<212> PRT
<213> Llama glama

<400> 56

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

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

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Gly Ile Thr Trp Ser Gly Gly Ser Thr His Tyr Ala Asp Leu Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val His
65 70 75 80

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Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Val Phe Ser Gly Ala Glu Thr Ala Tyr Tyr Pro Ser Thr Glu
100 105 110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 57
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<212> PRT
<213> Llama glama

<400> 57

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Pro Phe Asn Asn Tyr
20 25 30

Gly Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Gly Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Val Phe Ser Gly Ala Glu Thr Ala Gln Tyr Pro Ser Tyr Asp
100 105 110

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser

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115

120

125

<210> 58
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<400> 58

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

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

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Ala Val Thr Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Gln Phe Asn Gly Ala Glu Asn Ile Val Pro Ala Thr Thr Thr
 100 105 110

Pro Thr Ser Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
 115 120 125

Ser

<210> 59
 <211> 130

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<212> PRT

<213> Llama glama

<400> 59

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Pro Phe Ser Asn Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Ser Trp Ser Gly Gly Ser Thr Ser Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Pro Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys
85 90 95

Ala Ala Gln Phe Ser Gly Ala Asp Tyr Gly Phe Gly Arg Leu Gly Ile
100 105 110

Arg Gly Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
115 120 125

Ser Ser
130

<210> 60

<211> 130

<212> PRT

<213> Llama glama

<400> 60

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Pro Phe Ser Asn Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Ser Trp Ser Gly Gly Ser Thr Ser Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Pro Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys
85 90 95

Ala Ala Gln Phe Ser Gly Ala Asp Tyr Gly Phe Gly Arg Leu Gly Ile
100 105 110

Gln Gly Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
115 120 125

Ser Ser
130

<210> 61
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<213> Llama glama

<400> 61

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asn Tyr

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20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Met Phe Ser Gly Ser Glu Ser Gln Leu Val Val Val Ile Thr
100 105 110

Asn Leu Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
115 120 125

Ser Ser
130

<210> 62
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<213> Llama glama

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asn Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

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Ala Thr Ile Ser Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Ala Phe Ser Gly Ser Asp Tyr Ala Asn Thr Lys Lys Glu Val
100 105 110

Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 63
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<213> Llama glama

<400> 63

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Arg Thr Phe Ser Asn Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Ser Trp Ser Gly Gly Met Thr Asp His Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

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Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Ala Phe Ala Gly Asp Ile Pro Tyr Gly Ser Ser Trp Tyr Gly
100 105 110

Asp Pro Thr Thr Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
115 120 125

Ser Ser
130

<210> 64
<211> 124
<212> PRT
<213> Llama glama

<400> 64

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Ser Ser Thr Phe
20 25 30

Ser Met Ala Trp Phe Arg Gln Ala Pro Arg Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Asn Trp Ser Gly Gly Ser Thr Arg Tyr Ala Asp Ser Val
50 55 60

Ser Asp Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Asn Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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Ala Ala Arg Arg Gly Gly Ile Tyr Tyr Ser Thr Gln Asn Asp Tyr Asp
 100 105 110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 65
 <211> 123
 <212> PRT
 <213> Llama glama

<400> 65

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Val Arg Thr Phe Ser Asp Tyr
 20 25 30

Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ser Thr Ile Ser Trp Ser Gly Gly Leu Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Gly Gly Gly Tyr Ala Gly Gly Thr Tyr Tyr His Pro Glu Glu
 100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 66

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<211> 127
 <212> PRT
 <213> Llama glama

<400> 66

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

Cys Ile Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Pro Val
 35 40 45

Ser Cys Ile Thr Thr Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Arg Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Tyr Phe Gly Tyr Gly Cys Tyr Gly Gly Ala Gln Asp Tyr Arg
 100 105 110

Ala Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 67
 <211> 25
 <212> PRT
 <213> Llama glama

<400> 67

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
 1 5 10 15

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Ser Leu Arg Leu Ser Cys Ala Ala Ser
20 25

<210> 68
<211> 14
<212> PRT
<213> Llama glama

<400> 68

Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
1 5 10

<210> 69
<211> 32
<212> PRT
<213> Llama glama

<400> 69

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
20 25 30

<210> 70
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<212> PRT
<213> Llama glama

<400> 70

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
1 5 10

<210> 71
<211> 315
<212> PRT
<213> Homo Sapiens

<400> 71

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Met Leu Ser Leu Leu His Ala Ser Thr Leu Ala Val Leu Gly Ala Leu
1 5 10 15

Cys Val Tyr Gly Ala Gly His Leu Glu Gln Pro Gln Ile Ser Ser Thr
20 25 30

Lys Thr Leu Ser Lys Thr Ala Arg Leu Glu Cys Val Val Ser Gly Ile
35 40 45

Thr Ile Ser Ala Thr Ser Val Tyr Trp Tyr Arg Glu Arg Pro Gly Glu
50 55 60

Val Ile Gln Phe Leu Val Ser Ile Ser Tyr Asp Gly Thr Val Arg Lys
65 70 75 80

Glu Ser Gly Ile Pro Ser Gly Lys Phe Glu Val Asp Arg Ile Pro Glu
85 90 95

Thr Ser Thr Ser Thr Leu Thr Ile His Asn Val Glu Lys Gln Asp Ile
100 105 110

Ala Thr Tyr Tyr Cys Ala Leu Trp Glu Ala Gln Gln Glu Leu Gly Lys
115 120 125

Lys Ile Lys Val Phe Gly Pro Gly Thr Lys Leu Ile Ile Thr Asp Lys
130 135 140

Gln Leu Asp Ala Asp Val Ser Pro Lys Pro Thr Ile Phe Leu Pro Ser
145 150 155 160

Ile Ala Glu Thr Lys Leu Gln Lys Ala Gly Thr Tyr Leu Cys Leu Leu
165 170 175

Glu Lys Phe Phe Pro Asp Val Ile Lys Ile His Trp Glu Glu Lys Lys
180 185 190

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Ser Asn Thr Ile Leu Gly Ser Gln Glu Gly Asn Thr Met Lys Thr Asn
195 200 205

Asp Thr Tyr Met Lys Phe Ser Trp Leu Thr Val Pro Glu Lys Ser Leu
210 215 220

Asp Lys Glu His Arg Cys Ile Val Arg His Glu Asn Asn Lys Asn Gly
225 230 235 240

Val Asp Gln Glu Ile Ile Phe Pro Pro Ile Lys Thr Asp Val Ile Thr
245 250 255

Met Asp Pro Lys Asp Asn Cys Ser Lys Asp Ala Asn Asp Thr Leu Leu
260 265 270

Leu Gln Leu Thr Asn Thr Ser Ala Tyr Tyr Met Tyr Leu Leu Leu Leu
275 280 285

Leu Lys Ser Val Val Tyr Phe Ala Ile Ile Thr Cys Cys Leu Leu Arg
290 295 300

Arg Thr Ala Phe Cys Cys Asn Gly Glu Lys Ser
305 310 315

<210> 72
<211> 292
<212> PRT
<213> Homo Sapiens

<400> 72

Met Gln Arg Ile Ser Ser Leu Ile His Leu Ser Leu Phe Trp Ala Gly
1 5 10 15

Val Met Ser Ala Ile Glu Leu Val Pro Glu His Gln Thr Val Pro Val
20 25 30

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Ser Ile Gly Val Pro Ala Thr Leu Arg Cys Ser Met Lys Gly Glu Ala
35 40 45

Ile Gly Asn Tyr Tyr Ile Asn Trp Tyr Arg Lys Thr Gln Gly Asn Thr
50 55 60

Met Thr Phe Ile Tyr Arg Glu Lys Asp Ile Tyr Gly Pro Gly Phe Lys
65 70 75 80

Asp Asn Phe Gln Gly Asp Ile Asp Ile Ala Lys Asn Leu Ala Val Leu
85 90 95

Lys Ile Leu Ala Pro Ser Glu Arg Asp Glu Gly Ser Tyr Tyr Cys Ala
100 105 110

Cys Asp Thr Leu Gly Met Gly Gly Glu Tyr Thr Asp Lys Leu Ile Phe
115 120 125

Gly Lys Gly Thr Arg Val Thr Val Glu Pro Arg Ser Gln Pro His Thr
130 135 140

Lys Pro Ser Val Phe Val Met Lys Asn Gly Thr Asn Val Ala Cys Leu
145 150 155 160

Val Lys Glu Phe Tyr Pro Lys Asp Ile Arg Ile Asn Leu Val Ser Ser
165 170 175

Lys Lys Ile Thr Glu Phe Asp Pro Ala Ile Val Ile Ser Pro Ser Gly
180 185 190

Lys Tyr Asn Ala Val Lys Leu Gly Lys Tyr Glu Asp Ser Asn Ser Val
195 200 205

Thr Cys Ser Val Gln His Asp Asn Lys Thr Val His Ser Thr Asp Phe
210 215 220

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Glu Val Lys Thr Asp Ser Thr Asp His Val Lys Pro Lys Glu Thr Glu
225 230 235 240

Asn Thr Lys Gln Pro Ser Lys Ser Cys His Lys Pro Lys Ala Ile Val
245 250 255

His Thr Glu Lys Val Asn Met Met Ser Leu Thr Val Leu Gly Leu Arg
260 265 270

Met Leu Phe Ala Lys Thr Val Ala Val Asn Phe Leu Leu Thr Ala Lys
275 280 285

Leu Phe Phe Leu
290