

SEQUENCE LISTING

<110> Novo Nordisk A/S

<120> ANTI-HUMAN INTERLEUKIN-20 ANTIBODIES

<130> 7806.204-WO

<160> 46

<170> PatentIn version 3.5

<210> 1

<211> 152

<212> PRT

<213> Homo sapiens

<400> 1

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

Asp	Gly	Asn	Ile	Asp	Ile	Arg	Ile	Leu	Arg	Arg	Thr	Glu	Ser	Leu	Gln
		35					40					45			

Asp	Thr	Lys	Pro	Ala	Asn	Arg	Cys	Cys	Leu	Leu	Arg	His	Leu	Leu	Arg
	50					55					60				

Leu	Tyr	Leu	Asp	Arg	Val	Phe	Lys	Asn	Tyr	Gln	Thr	Pro	Asp	His	Tyr
65					70					75					80

Thr	Leu	Arg	Lys	Ile	Ser	Ser	Leu	Ala	Asn	Ser	Phe	Leu	Thr	Ile	Lys
				85					90					95	

Lys	Asp	Leu	Arg	Leu	Cys	His	Ala	His	Met	Thr	Cys	His	Cys	Gly	Glu
			100					105					110		

Glu	Ala	Met	Lys	Lys	Tyr	Ser	Gln	Ile	Leu	Ser	His	Phe	Glu	Lys	Leu
		115					120					125			

Glu	Pro	Gln	Ala	Ala	Val	Val	Lys	Ala	Leu	Gly	Glu	Leu	Asp	Ile	Leu
	130					135					140				

Leu	Gln	Trp	Met	Glu	Glu	Thr	Glu
145					150		

<210> 2
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<212> PRT
<213> Homo sapiens

<400> 2

Met Lys Ala Ser Ser Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr
1 5 10 15

Leu Leu Trp Thr Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser
20 25 30

Cys Val Ile Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu
35 40 45

Ile Arg Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile
50 55 60

Leu Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys
65 70 75 80

Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe Lys
85 90 95

Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser Ser Leu
100 105 110

Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu Cys His Ala
115 120 125

His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys Lys Tyr Ser Gln
130 135 140

Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln Ala Ala Val Val Lys
145 150 155 160

Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln Trp Met Glu Glu Thr Glu
165 170 175

<210> 3
<211> 177
<212> PRT
<213> Homo sapiens

<400> 3

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

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

Asp Met His His Ile Glu Glu Ser Phe Gln Glu Ile Lys Arg Ala Ile
35 40 45

Gln Ala Lys Asp Thr Phe Pro Asn Val Thr Ile Leu Ser Thr Leu Glu
50 55 60

Thr Leu Gln Ile Ile Lys Pro Leu Asp Val Cys Cys Val Thr Lys Asn
65 70 75 80

Leu Leu Ala Phe Tyr Val Asp Arg Val Phe Lys Asp His Gln Glu Pro
85 90 95

Asn Pro Lys Ile Leu Arg Lys Ile Ser Ser Ile Ala Asn Ser Phe Leu
100 105 110

Tyr Met Gln Lys Thr Leu Arg Gln Cys Gln Glu Gln Arg Gln Cys His
115 120 125

Cys Arg Gln Glu Ala Thr Asn Ala Thr Arg Val Ile His Asp Asn Tyr
130 135 140

Asp Gln Leu Glu Val His Ala Ala Ala Ile Lys Ser Leu Gly Glu Leu
145 150 155 160

Asp Val Phe Leu Ala Trp Ile Asn Lys Asn His Glu Val Met Phe Ser
165 170 175

Ala

<210> 4

<211> 176

<212> PRT

<213> Mus musculus

<400> 4

Met Lys Gly Phe Gly Leu Ala Phe Gly Leu Phe Ser Ala Val Gly Phe
1 5 10 15

Leu Leu Trp Thr Pro Leu Thr Gly Leu Lys Thr Leu His Leu Gly Ser
20 25 30

Cys Val Ile Thr Ala Asn Leu Gln Ala Ile Gln Lys Glu Phe Ser Glu
35 40 45

Ile Arg Asp Ser Val Gln Ala Glu Asp Thr Asn Ile Asp Ile Arg Ile
50 55 60

Leu Arg Thr Thr Glu Ser Leu Lys Asp Ile Lys Ser Leu Asp Arg Cys
65 70 75 80

Cys Phe Leu Arg His Leu Val Arg Phe Tyr Leu Asp Arg Val Phe Lys
85 90 95

Val Tyr Gln Thr Pro Asp His His Thr Leu Arg Lys Ile Ser Ser Leu
100 105 110

Ala Asn Ser Phe Leu Ile Ile Lys Lys Asp Leu Ser Val Cys His Ser
115 120 125

His Met Ala Cys His Cys Gly Glu Glu Ala Met Glu Lys Tyr Asn Gln
130 135 140

Ile Leu Ser His Phe Ile Glu Leu Glu Leu Gln Ala Ala Val Val Lys
145 150 155 160

Ala Leu Gly Glu Leu Gly Ile Leu Leu Arg Trp Met Glu Glu Met Leu
165 170 175

<210> 5
<211> 176
<212> PRT
<213> Macaca fascicularis

<400> 5

Met Lys Ala Ser Ser Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr
1 5 10 15

Leu Leu Trp Thr Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser

20

25

30

Cys Val Ile Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu
35 40 45

Ile Arg Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile
50 55 60

Leu Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asp Gln Cys
65 70 75 80

Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe Lys
85 90 95

Asn Tyr Gln Thr Leu Asp His Tyr Thr Leu Arg Lys Ile Ser Ser Leu
100 105 110

Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu Cys His Ala
115 120 125

His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys Lys Tyr Gly Gln
130 135 140

Ile Leu Ser His Phe Glu Glu Leu Glu Pro Gln Ala Ala Val Val Lys
145 150 155 160

Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln Trp Met Glu Glu Thr Glu
165 170 175

<210> 6

<211> 127

<212> PRT

<213> Homo sapiens

<400> 6

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Asp
20 25 30

Ile Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Ala Gly Tyr Gly Asn Thr Gln Tyr Ser Gln Asn Phe
50 55 60

Gln Asp Arg Val Ser Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ile Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

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

<210> 7
<211> 127
<212> PRT
<213> Homo sapiens

<400> 7

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser His
20 25 30

Ile Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Ala Gly Tyr Gly Asn Thr Lys Tyr Ser Gln Asn Phe
50 55 60

Gln Asp Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ile Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

115

120

125

<210> 8
 <211> 127
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (31)..(31)
 <223> X2 is N, S, or a conservative substitution of any thereof

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 <222> (32)..(32)
 <223> X3 is D, H, or a conservative substitution of any thereof

<220>
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 <222> (34)..(34)
 <223> X4 is I, M, or a conservative substitution of any thereof

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 <222> (59)..(59)
 <223> X5 is K, Q, or a conservative substitution of any thereof

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 <222> (69)..(69)
 <223> X6 is S, T, or a conservative substitution of any thereof

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 <223> X7 is S, L, or a conservative substitution of any thereof

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Xaa Xaa Xaa
 20 25 30

Ile Xaa His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
 35 40 45

Gly Trp Ile Asn Ala Gly Tyr Gly Asn Thr Xaa Tyr Ser Gln Asn Phe
50 55 60

Gln Asp Arg Val Xaa Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ile Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Pro Leu Trp Phe Gly Glu Xaa Ser Pro His Asp Tyr Tyr
100 105 110

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

<210> 9
<211> 108
<212> PRT
<213> Homo sapiens

<400> 9

Ala Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Ala
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 10

<211> 98
<212> PRT
<213> Homo sapiens

<400> 10

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Ala Gly Asn Gly Asn Thr Lys Tyr Ser Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg

<210> 11
<211> 31
<212> DNA
<213> Homo sapiens

<400> 11
gtattactat ggttcgggga gttattataa c

31

<210> 12
<211> 9
<212> PRT
<213> Homo sapiens

<400> 12

Val Leu Leu Trp Phe Gly Glu Leu Leu
1 5

<210> 13
<211> 63
<212> DNA

<213> Homo sapiens

<400> 13
attactacta ctactacggt atggacgtct gggggcaagg gaccacgggc accgtctcct 60

cag 63

<210> 14
<211> 20
<212> PRT
<213> Homo sapiens

<400> 14

Tyr Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val
1 5 10 15

Thr Val Ser Ser
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<210> 15
<211> 95
<212> PRT
<213> Homo sapiens

<400> 15

Ala Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Ala
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Phe Asn Ser Tyr Pro
85 90 95

<210> 16
<211> 38
<212> DNA

<213> Homo sapiens

<400> 16
gctcactttc ggcggaggga ccaaggtgga gatcaaac

38

<210> 17
<211> 12
<212> PRT
<213> Homo sapiens

<400> 17

Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
1 5 10

<210> 18
<211> 123
<212> PRT
<213> homo sapiens

<400> 18

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

Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Phe Ser Thr Asn
20 25 30

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

Trp Leu Ala Leu Ile Tyr Trp Asn Asp Asp Lys Arg Tyr Ser Pro Ser
50 55 60

Leu Lys Ser Arg Leu Thr Ile Thr Lys Asp Thr Ser Lys Asn Gln Val
65 70 75 80

Val Leu Thr Met Thr Asn Met Asp Pro Leu Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala His Ser Pro Phe Ile Met Val Arg Gly Val Ile Ile Thr Phe
100 105 110

Phe Asp Phe Trp Gly Gln Gly Thr Leu Val Thr
115 120

<210> 19

<211> 109
<212> PRT
<213> Homo sapiens

<400> 19

Val Ile Trp Met Thr Gln Ser Pro Ser Leu Leu Ser Ala Ser Thr Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Met Ser Gln Gly Ile Ser Ser Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Cys Leu Gln Ser
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ser Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr
100 105

<210> 20
<211> 123
<212> PRT
<213> Homo sapiens

<400> 20

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Asn
20 25 30

Asn Tyr Tyr Trp Ala Trp Ile Arg Gln Pro Pro Gly Lys Gly Pro Glu
35 40 45

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

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

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Ala Ala Val Tyr Phe
85 90 95

Cys Ala Gly Leu Val Val Ile Pro Ala Ser Asp Tyr Ser Tyr Tyr Gly
100 105 110

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

<210> 21
<211> 110
<212> PRT
<213> Homo sapiens

<400> 21

Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro
85 90 95

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr
100 105 110

<210> 22
<211> 122
<212> PRT
<213> Homo sapiens

<400> 22

Gln Val Gln Val Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

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

Ala Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Ala Gly Tyr Gly Asn Thr Lys Tyr Ser Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Gly Gly Ala Leu Ser Trp Phe Gly Glu Ser Gln Gly Phe
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
115 120

<210> 23
<211> 122
<212> PRT
<213> Homo sapiens

<400> 23

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

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

Ala Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Ala Gly Tyr Gly Asn Thr Lys Tyr Ser Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr

65					70						75					80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
			85						90					95		
Ala	Arg	Glu	Gly	Gly	Val	Leu	Leu	Trp	Phe	Gly	Glu	Ser	Gln	Gly	Phe	
			100					105					110			
Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr							
		115					120									

<210> 24
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 24																
Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Gly	Thr	Leu	Ser	Leu	Ser	Pro	Gly	
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Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Ser	
			20					25					30			
Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	
		35					40					45				
Ile	Tyr	Gly	Ala	Ser	Ser	Arg	Ala	Thr	Gly	Ile	Pro	Asp	Arg	Phe	Ser	
		50				55					60					
Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Arg	Leu	Glu	
65					70					75					80	
Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Gly	Ser	Ser	Pro	
			85						90					95		
Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr					
			100					105								

<210> 25
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 <212> PRT
 <213> Homo sapiens

<400> 25

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
1 5 10 15

Ala His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Arg
20 25 30

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

Thr Asn Asp Ile Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu
50 55 60

Glu Trp Met Gly Trp Ile Asn Ala Gly Tyr Gly Asn Thr Gln Tyr Ser
65 70 75 80

Gln Asn Phe Gln Asp Arg Val Ser Ile Thr Arg Asp Thr Ser Ala Ser
85 90 95

Thr Ala Tyr Met Glu Leu Ile Ser Leu Arg Ser Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Glu Pro Leu Trp Phe Gly Glu Ser Ser Pro His
115 120 125

Asp Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
130 135 140

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

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys
165 170 175

Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu
180 185 190

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu
195 200 205

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr
210 215 220

Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val

225				230					235					240		
Asp	Lys	Arg	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	
				245					250					255		
Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	
				260					265					270		
Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	
				275					280					285		
Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	
				290					295					300		
Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	
				305					310					315		
Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	
				325					330					335		
Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	
				340					345					350		
Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	
				355					360					365		
Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	
				370					375					380		
Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	
				385					390					395		
Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	
				405					410					415		
Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	
				420					425					430		
Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	
				435					440					445		
Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	
				450					455					460		

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
465 470 475

<210> 26
<211> 552
<212> PRT
<213> Macaca fascicularis

<400> 26

Met Arg Ala Pro Ser Ser Pro Ala Leu Arg Pro Leu Leu Pro Pro Leu
1 5 10 15

Leu Leu Leu Leu Leu Ala Ala Pro Trp Gly Leu Ala Val Pro Cys Val
20 25 30

Ser Gly Gly Leu Pro Lys Pro Ala Asn Ile Thr Phe Leu Ser Ile Asn
35 40 45

Met Lys Asn Val Leu Gln Trp Asn Pro Pro Glu Cys Leu Gln Gly Val
50 55 60

Lys Val Thr Tyr Thr Val Gln Tyr Phe Ile Tyr Gly Gln Lys Lys Trp
65 70 75 80

Leu Asn Lys Ser Glu Cys Arg Asn Ile Asn Arg Thr Tyr Cys Asp Leu
85 90 95

Ser Ala Glu Thr Ser Asp Tyr Glu His Gln Tyr Tyr Ala Lys Val Lys
100 105 110

Ala Ile Trp Gly Thr Asn Cys Ser Lys Trp Ala Glu Ser Gly Arg Phe
115 120 125

Tyr Pro Phe Leu Glu Thr Gln Ile Gly Pro Pro Glu Val Ala Leu Thr
130 135 140

Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr Ala Pro Glu Lys Trp
145 150 155 160

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

Asn Leu Lys Tyr Asn Val Ser Val Ser Asn Thr Lys Ser Asn Arg Thr
180 185 190

Trp Ser Gln Cys Val Thr Asn His Thr Leu Val Leu Thr Trp Leu Glu
195 200 205

Pro Asn Thr Leu Tyr Cys Ile His Val Glu Ser Phe Val Pro Gly Pro
210 215 220

Pro Arg Arg Ala Gln Pro Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys
225 230 235 240

Asp Gln Ser Ser Glu Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu
245 250 255

Pro Val Ser Val Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile
260 265 270

Tyr Arg Tyr Ile His Val Gly Lys Glu Lys His Pro Ala Asn Leu Ile
275 280 285

Leu Ile Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu
290 295 300

Lys Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys
305 310 315 320

Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val Ser
325 330 335

Ser Leu Asn Asp Pro Gln Pro Ser Gly Asn Leu Lys Pro Pro Gln Glu
340 345 350

Glu Glu Glu Val Lys His Leu Gly Tyr Ala Ser His Leu Met Glu Ile
355 360 365

Val Cys Asp Ser Glu Glu Asn Ala Glu Gly Thr Ser Leu Thr Gln Gln
370 375 380

Ala Ser Leu Ser Arg Thr Ile Pro Pro Asp Lys Thr Val Ile Glu Tyr
385 390 395 400

Glu Cys Asp Val Arg Thr Thr Asp Ile Cys Ala Gly Pro Glu Glu Gln

405	410	415
Glu Leu Arg Leu Gln Glu Glu Val Ser Thr Gln Gly Thr Leu Leu Glu		
420	425	430
Ser Gln Ala Ala Leu Ala Leu Leu Gly Pro Gln Thr Leu Gln Tyr Ser		
435	440	445
Tyr Thr Pro Gln Leu Gln Asp Leu Asp Pro Leu Thr Arg Glu His Thr		
450	455	460
Asp Ser Glu Glu Gly Pro Glu Glu Glu Pro Ser Thr Thr Leu Val Asp		
465	470	475
Trp Asp Pro Gln Thr Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe		
485	490	495
Asp Gln Asp Ser Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly		
500	505	510
Glu Glu Gly Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg		
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Pro Pro Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp		
530	535	540
Gly Leu Tyr Val Gln Met Glu Asn		
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Met Trp Phe Phe Tyr Ala Leu Ile Pro Cys Leu Leu Thr Asp Glu Val		
20	25	30
Ala Ile Leu Pro Ala Pro Gln Asn Leu Ser Val Leu Ser Thr Asn Met		
35	40	45

Lys His Leu Leu Met Trp Ser Pro Val Thr Val Pro Gly Glu Thr Val
50 55 60

Tyr Tyr Ser Val Glu Tyr Gln Gly Glu Tyr Glu Ser Leu Tyr Thr Ser
65 70 75 80

His Ile Trp Ile Pro Ser Ser Trp Cys Ser Leu Thr Glu Gly Pro Glu
85 90 95

Cys Asp Val Thr Asp Asp Ile Thr Ala Thr Val Pro Tyr Asn Leu Arg
100 105 110

Val Arg Ala Thr Leu Gly Ser Gln Thr Ser Ala Trp Ser Ile Leu Lys
115 120 125

His Pro Phe Asn Arg Asn Ser Thr Ile Leu Thr Pro Pro Gly Met Glu
130 135 140

Ile Thr Lys Asp Gly Phe His Leu Val Ile Glu Leu Glu Asp Leu Gly
145 150 155 160

Pro Gln Phe Glu Phe Leu Val Ala Tyr Trp Arg Arg Glu Pro Gly Ala
165 170 175

Glu Glu His Val Lys Met Val Arg Ser Gly Gly Ile Pro Val His Leu
180 185 190

Glu Thr Met Glu Pro Gly Ala Ala Tyr Cys Val Lys Ala Gln Thr Phe
195 200 205

Val Lys Ala Ile Gly Arg Tyr Ser Ala Phe Ser Gln Thr Glu Cys Val
210 215 220

Glu Val Gln Gly Glu Ala Ile Pro Leu Val Leu Ala Leu Phe Ala Phe
225 230 235 240

Val Gly Phe Met Leu Ile Leu Val Val Val Pro Leu Phe Val Trp Lys
245 250 255

Met Gly Arg Leu Leu Gln Tyr Ser Cys Cys Pro Val Val Val Leu Pro
260 265 270

Asp Thr Leu Lys Ile Thr Asn Ser Pro Gln Lys Leu Ile Ser Cys Arg
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Arg Glu Glu Val Asp Ala Cys Ala Thr Ala Val Met Ser Pro Glu Glu
290 295 300

Leu Leu Arg Ala Trp Ile Ser
305 310

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<400> 28

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Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe Gln Ser
20 25 30

Asn Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro Glu Gly Thr
35 40 45

Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr Gly Glu Arg Asp
50 55 60

Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr Arg Lys Ser Cys Asn
65 70 75 80

Leu Thr Val Glu Thr Gly Asn His Thr Glu Leu Tyr Tyr Ala Arg Val
85 90 95

Thr Ala Val Ser Ala Gly Gly Arg Ser Ala Thr Lys Met Thr Asp Arg
100 105 110

Phe Asn Ser Leu Gln His Thr Ala Leu Lys Pro Pro Asp Val Thr Cys
115 120 125

Ile Pro Lys Val Arg Ser Ile Gln Met Ile Val His Pro Thr Pro Thr
130 135 140

Pro Ile Arg Ala Gly Asp Gly His Arg Leu Thr Leu Glu Asp Ile Phe
145 150 155 160

His Asp Leu Phe Tyr His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln
165 170 175

Met His Leu Gly Gly Glu Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr
180 185 190

Pro Asp Thr Glu Phe Leu Gly Thr Ile Met Ile Cys Val Pro Thr Trp
195 200 205

Ser Lys Lys Ser Ala Pro Tyr Met Cys Arg Val Arg Thr Leu Pro Asp
210 215 220

Arg Thr Trp Thr Tyr Ser Phe Ser Gly Ala Phe Leu Phe Ser Met Gly
225 230 235 240

Phe Leu Val Ala Val Leu Cys Tyr Leu Ser Tyr Arg Tyr Val Thr Lys
245 250 255

Pro Pro Ala Pro Pro Asn Ser Leu Asn Val Gln Arg Val Leu Thr Phe
260 265 270

Gln Pro Leu Arg Phe Ile Gln Glu His Val Leu Ile Pro Ala Phe Asp
275 280 285

Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro Val Gln Tyr Ser Gln Ile
290 295 300

Arg Val Ser Gly Pro Arg Glu Pro Ala Gly Pro Pro Gln Arg His Ser
305 310 315 320

Leu Ser Glu Ile Thr Tyr Leu Gly Gln Pro Asp Ile Ser Ile Leu Gln
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Pro Ala Asn Val Pro Pro Pro Gln Ile Leu Ser Pro Leu Ser Tyr Ala
340 345 350

Pro Asn Ala Ala Pro Glu Val Gly Pro Pro Ser Tyr Ala Pro Gln Val
355 360 365

Thr Pro Glu Ala Gln Leu Pro Phe Tyr Thr Pro Gln Ala Val Ser Lys
370 375 380

Val Gln Pro Pro Ser Tyr Ala Pro Gln Ala Thr Pro Asp Ser Trp Pro
 385 390 395 400

Pro Ser Tyr Gly Val Cys Val Glu Gly Ser Gly Lys Asp Ser Pro Thr
 405 410 415

Val Thr Leu Ser Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln
 420 425 430

Lys Glu Pro Pro Ala Gly Ser Cys Met Ser Gly Gly Leu Ser Leu Gln
 435 440 445

Glu Val Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu
 450 455 460

His Gln Pro Leu Gly Val Cys Thr Asp Arg Thr Ser Asp Leu Asn Val
 465 470 475 480

Leu Asp Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln Leu
 485 490 495

Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser Leu Pro
 500 505 510

Leu His Pro Pro Ser Arg Pro Cys Ser Pro Ser Asp Gln Gly Pro Ser
 515 520 525

Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys Asp Glu Ala Lys
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Ser Leu Ala Pro Glu Thr Ser Asp Leu Glu Gln Pro Thr Glu Leu Asp
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Ser Leu Phe Arg Gly Leu Ala Leu Thr Val Gln Trp Glu Ser
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