

SEQUENCE LISTING

<110> AdrenoMed AG

<120> Anti-Adrenomedullin (ADM) antibody or anti-ADM antibody fragment or anti-ADM non-Ig scaffold for use in therapy or prevention of shock

<130> A75355W0

<150> 20159913.1

<151> 2020-02-27

<160> 37

<170> PatentIn version 3.5

<210> 1

<211> 8

<212> PRT

<213> Homo sapiens

<400> 1

Gly Tyr Thr Phe Ser Arg Tyr Trp
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<210> 2

<211> 8

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<400> 2

Ile Leu Pro Gly Ser Gly Ser Thr
1 5

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<211> 11

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<213> Homo sapiens

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Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr
1 5 10

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<211> 11
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<213> Homo sapiens

<400> 4

Gln Ser Ile Val Tyr Ser Asn Gly Asn Thr Tyr
1 5 10

<210> 5
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<213> Homo sapiens

<400> 5

Phe Gln Gly Ser His Ile Pro Tyr Thr
1 5

<210> 6
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<213> Homo sapiens

<400> 6

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

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

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

Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

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

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

Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Leu Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly
130 135 140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
145 150 155 160

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
165 170 175

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
180 185 190

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser
195 200 205

Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
210 215

<210> 7
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<213> Homo sapiens

<400> 7

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

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

Trp Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

35

40

45

Gly Arg Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Gln Lys Phe
50 55 60

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

Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly
130 135 140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
145 150 155 160

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
165 170 175

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
180 185 190

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser
195 200 205

Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
210 215

<210> 8

<211> 219

<212> PRT

<213> Homo sapiens

<400> 8

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

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

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

Gly Arg Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Gln Lys Phe
50 55 60

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

Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly
130 135 140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
145 150 155 160

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
165 170 175

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
180 185 190

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser
195 200 205

Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
210 215

<210> 9
<211> 219
<212> PRT
<213> Homo sapiens

<400> 9

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

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

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

Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Gln Lys Phe
50 55 60

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

Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly

130

135

140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
 145 150 155 160

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
 165 170 175

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
 180 185 190

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser
 195 200 205

Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
 210 215

<210> 10
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 <213> Homo sapiens

<400> 10

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

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

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

Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Gln Lys Phe
 50 55 60

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

Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly
130 135 140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
145 150 155 160

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
165 170 175

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
180 185 190

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser
195 200 205

Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
210 215

<210> 11
<211> 219
<212> PRT
<213> Homo sapiens

<400> 11

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

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

Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Lys Leu Leu Ile Tyr Arg Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95

Ser His Ile Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
180 185 190

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 12

<211> 219
<212> PRT
<213> Homo sapiens

<400> 12

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val Tyr Ser
20 25 30

Asn Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
35 40 45

Pro Arg Arg Leu Ile Tyr Arg Val Ser Asn Arg Asp Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95

Ser His Ile Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
180 185 190

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 13
<211> 219
<212> PRT
<213> Homo sapiens

<400> 13

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val Tyr Ser
20 25 30

Asn Gly Asn Thr Tyr Leu Glu Trp Phe Gln Gln Arg Pro Gly Gln Ser
35 40 45

Pro Arg Arg Leu Ile Tyr Arg Val Ser Asn Arg Asp Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95

Ser His Ile Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
180 185 190

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 14
<211> 21
<212> PRT
<213> Homo sapiens

<400> 14

Tyr Arg Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys
1 5 10 15

Arg Phe Gly Thr Cys
20

<210> 15
<211> 12
<212> PRT
<213> Homo sapiens

<400> 15

Cys Thr Val Gln Lys Leu Ala His Gln Ile Tyr Gln
1 5 10

<210> 16
<211> 12
<212> PRT
<213> Homo sapiens

<400> 16

Cys Ala Pro Arg Ser Lys Ile Ser Pro Gln Gly Tyr
1 5 10

<210> 17
<211> 19
<212> PRT
<213> Mus musculus

<400> 17

Tyr Arg Gln Ser Met Asn Gln Gly Ser Arg Ser Asn Gly Cys Arg Phe
1 5 10 15

Gly Thr Cys

<210> 18
<211> 12
<212> PRT
<213> Mus musculus

<400> 18

Cys Thr Phe Gln Lys Leu Ala His Gln Ile Tyr Gln
1 5 10

<210> 19
<211> 12
<212> PRT
<213> Mus musculus

<400> 19

Cys Ala Pro Arg Asn Lys Ile Ser Pro Gln Gly Tyr
1 5 10

<210> 20

<211> 52
<212> PRT
<213> Homo sapiens

<400> 20

Tyr Arg Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys
1 5 10 15

Arg Phe Gly Thr Cys Thr Val Gln Lys Leu Ala His Gln Ile Tyr Gln
20 25 30

Phe Thr Asp Lys Asp Lys Asp Asn Val Ala Pro Arg Ser Lys Ile Ser
35 40 45

Pro Gln Gly Tyr
50

<210> 21
<211> 50
<212> PRT
<213> Mus musculus

<400> 21

Tyr Arg Gln Ser Met Asn Gln Gly Ser Arg Ser Asn Gly Cys Arg Phe
1 5 10 15

Gly Thr Cys Thr Phe Gln Lys Leu Ala His Gln Ile Tyr Gln Leu Thr
20 25 30

Asp Lys Asp Lys Asp Gly Met Ala Pro Arg Asn Lys Ile Ser Pro Gln
35 40 45

Gly Tyr
50

<210> 22
<211> 21
<212> PRT
<213> Homo sapiens

<400> 22

Tyr Arg Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys
1 5 10 15

Arg Phe Gly Thr Cys
20

<210> 23

<211> 42

<212> PRT

<213> Homo sapiens

<400> 23

Tyr Arg Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys
1 5 10 15

Arg Phe Gly Thr Cys Thr Val Gln Lys Leu Ala His Gln Ile Tyr Gln
20 25 30

Phe Thr Asp Lys Asp Lys Asp Asn Val Ala
35 40

<210> 24

<211> 12

<212> PRT

<213> Homo sapiens

<400> 24

Pro Arg Ser Lys Ile Ser Pro Gln Gly Tyr Asn His
1 5 10

<210> 25

<211> 14

<212> PRT

<213> Homo sapiens

<400> 25

Tyr Arg Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe
1 5 10

<210> 26
<211> 10
<212> PRT
<213> Homo sapiens

<400> 26

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

<210> 27
<211> 6
<212> PRT
<213> Homo sapiens

<400> 27

Tyr Arg Gln Ser Met Asn
1 5

<210> 28
<211> 32
<212> PRT
<213> Homo sapiens

<400> 28

Tyr Arg Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys
1 5 10 15

Arg Phe Gly Thr Cys Thr Val Gln Lys Leu Ala His Gln Ile Tyr Gln
20 25 30

<210> 29
<211> 40
<212> PRT
<213> Mus musculus

<400> 29

Tyr Arg Gln Ser Met Asn Gln Gly Ser Arg Ser Asn Gly Cys Arg Phe
1 5 10 15

Gly Thr Cys Thr Phe Gln Lys Leu Ala His Gln Ile Tyr Gln Leu Thr

20

25

30

Asp Lys Asp Lys Asp Gly Met Ala
 35 40

<210> 30
 <211> 31
 <212> PRT
 <213> Mus musculus

<400> 30

Tyr Arg Gln Ser Met Asn Gln Gly Ser Arg Ser Asn Gly Cys Arg Phe
 1 5 10 15

Gly Thr Cys Thr Phe Gln Lys Leu Ala His Gln Ile Tyr Gln Leu
 20 25 30

<210> 31
 <211> 164
 <212> PRT
 <213> Homo sapiens

<400> 31

Ala Arg Leu Asp Val Ala Ser Glu Phe Arg Lys Lys Trp Asn Lys Trp
 1 5 10 15

Ala Leu Ser Arg Gly Lys Arg Glu Leu Arg Met Ser Ser Ser Tyr Pro
 20 25 30

Thr Gly Leu Ala Asp Val Lys Ala Gly Pro Ala Gln Thr Leu Ile Arg
 35 40 45

Pro Gln Asp Met Lys Gly Ala Ser Arg Ser Pro Glu Asp Ser Ser Pro
 50 55 60

Asp Ala Ala Arg Ile Arg Val Lys Arg Tyr Arg Gln Ser Met Asn Asn
 65 70 75 80

Phe Gln Gly Leu Arg Ser Phe Gly Cys Arg Phe Gly Thr Cys Thr Val

85

90

95

Gln Lys Leu Ala His Gln Ile Tyr Gln Phe Thr Asp Lys Asp Lys Asp
 100 105 110

Asn Val Ala Pro Arg Ser Lys Ile Ser Pro Gln Gly Tyr Gly Arg Arg
 115 120 125

Arg Arg Arg Ser Leu Pro Glu Ala Gly Pro Gly Arg Thr Leu Val Ser
 130 135 140

Ser Lys Pro Gln Ala His Gly Ala Pro Ala Pro Pro Ser Gly Ser Ala
 145 150 155 160

Pro His Phe Leu

<210> 32
 <211> 448
 <212> PRT
 <213> Homo sapiens

<400> 32

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

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

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

Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Gln Lys Phe
 50 55 60

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

Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
115 120 125

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly
130 135 140

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
145 150 155 160

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
165 170 175

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
180 185 190

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser
195 200 205

Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr
210 215 220

His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser
225 230 235 240

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
245 250 255

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
260 265 270

Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
275 280 285

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
290 295 300

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
305 310 315 320

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
325 330 335

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
340 345 350

Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
355 360 365

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
370 375 380

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
385 390 395 400

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
405 410 415

Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
420 425 430

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440 445

<210> 33

<211> 219

<212> PRT

<213> Homo sapiens

<400> 33

Asp Val Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly

1	5	10	15
Gln	Pro	Ala	Ser
	20		
Ile	Ser	Cys	Arg
		25	
Ser	Ser	Gln	Ser
Ile	Val	Tyr	Ser
	30		
Asn	Gly	Asn	Thr
	35		
Tyr	Leu	Glu	Trp
		40	
Tyr	Leu	Gln	Arg
Pro	Gly	Gln	Ser
Pro	Arg	Leu	Leu
	50		
Ile	Tyr	Arg	Val
		55	
Ser	Asn	Arg	Phe
			60
Ser	Gly	Val	Pro
Asp	Arg	Phe	Ser
	65		
Gly	Ser	Gly	Ser
	70		
Gly	Thr	Asp	Phe
		75	
Thr	Leu	Lys	Ile
			80
Ser	Arg	Val	Glu
Ala	Glu	Asp	Val
	85		
Gly	Val	Tyr	Tyr
Cys	Phe	Gln	Gly
		95	
Ser	His	Ile	Pro
Tyr	Thr	Phe	Gly
Gly	Gly	Gly	Thr
		105	
Lys	Leu	Glu	Ile
Lys			
	110		
Arg	Thr	Val	Ala
Ala	Pro	Ser	Val
Phe	Ile	Phe	Pro
Pro	Pro	Ser	Asp
Glu			
	115		
Gln	Leu	Lys	Ser
Gly	Thr	Ala	Ser
Val	Val	Cys	Leu
Leu	Leu	Asn	Asn
Phe			
	130		
Tyr	Pro	Arg	Glu
Ala	Lys	Val	Gln
Trp	Lys	Val	Asp
Asn	Ala	Leu	Gln
145			
Ser	Gly	Asn	Ser
Gln	Glu	Ser	Val
Thr	Glu	Gln	Asp
Ser	Lys	Asp	Ser
165			
Thr	Tyr	Ser	Leu
Ser	Ser	Thr	Leu
Thr	Leu	Ser	Lys
Ala	Asp	Tyr	Glu
180			
Lys	His	Lys	Val
Tyr	Ala	Cys	Glu
Val	Thr	His	Gln
Gly	Leu	Ser	Ser
195			
200			
205			

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 34
<211> 737
<212> PRT
<213> Homo sapiens

<400> 34

Met Ala Asp Thr Gln Tyr Ile Leu Pro Asn Asp Ile Gly Val Ser Ser
1 5 10 15

Leu Asp Cys Arg Glu Ala Phe Arg Leu Leu Ser Pro Thr Glu Arg Leu
20 25 30

Tyr Ala Tyr His Leu Ser Arg Ala Ala Trp Tyr Gly Gly Leu Ala Val
35 40 45

Leu Leu Gln Thr Ser Pro Glu Ala Pro Tyr Ile Tyr Ala Leu Leu Ser
50 55 60

Arg Leu Phe Arg Ala Gln Asp Pro Asp Gln Leu Arg Gln His Ala Leu
65 70 75 80

Ala Glu Gly Leu Thr Glu Glu Glu Tyr Gln Ala Phe Leu Val Tyr Ala
85 90 95

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

Lys Phe Val Pro Asn Leu Pro Lys Glu Lys Leu Glu Arg Val Ile Leu
115 120 125

Gly Ser Glu Ala Ala Gln Gln His Pro Glu Glu Val Arg Gly Leu Trp
130 135 140

Gln Thr Cys Gly Glu Leu Met Phe Ser Leu Glu Pro Arg Leu Arg His
145 150 155 160

Leu Gly Leu Gly Lys Glu Gly Ile Thr Thr Tyr Phe Ser Gly Asn Cys
165 170 175

Thr Met Glu Asp Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn
180 185 190

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

Lys Pro Tyr Tyr Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro
210 215 220

Ser Leu Asp Ser Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg
225 230 235 240

Gly Ser Pro Phe Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln
245 250 255

Lys Val Val Glu Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser
260 265 270

His Gln Gly Gln Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly
275 280 285

Ser Ile Glu Ala His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys
290 295 300

Gly Pro Ile Val Glu Ser Tyr Ile Gly Phe Ile Glu Ser Tyr Arg Asp
305 310 315 320

Pro Phe Gly Ser Arg Gly Glu Phe Glu Gly Phe Val Ala Val Val Asn
325 330 335

Lys Ala Met Ser Ala Lys Phe Glu Arg Leu Val Ala Ser Ala Glu Gln
340 345 350

Leu Leu Lys Glu Leu Pro Trp Pro Pro Thr Phe Glu Lys Asp Lys Phe
355 360 365

Leu Thr Pro Asp Phe Thr Ser Leu Asp Val Leu Thr Phe Ala Gly Ser
370 375 380

Gly Ile Pro Ala Gly Ile Asn Ile Pro Asn Tyr Asp Asp Leu Arg Gln
385 390 395 400

Thr Glu Gly Phe Lys Asn Val Ser Leu Gly Asn Val Leu Ala Val Ala
405 410 415

Tyr Ala Thr Gln Arg Glu Lys Leu Thr Phe Leu Glu Glu Asp Asp Lys
420 425 430

Asp Leu Tyr Ile Leu Trp Lys Gly Pro Ser Phe Asp Val Gln Val Gly
435 440 445

Leu His Glu Leu Leu Gly His Gly Ser Gly Lys Leu Phe Val Gln Asp
450 455 460

Glu Lys Gly Ala Phe Asn Phe Asp Gln Glu Thr Val Ile Asn Pro Glu
465 470 475 480

Thr Gly Glu Gln Ile Gln Ser Trp Tyr Arg Ser Gly Glu Thr Trp Asp
485 490 495

Ser Lys Phe Ser Thr Ile Ala Ser Ser Tyr Glu Glu Cys Arg Ala Glu
500 505 510

Ser Val Gly Leu Tyr Leu Cys Leu His Pro Gln Val Leu Glu Ile Phe
515 520 525

Gly Phe Glu Gly Ala Asp Ala Glu Asp Val Ile Tyr Val Asn Trp Leu
530 535 540

Asn Met Val Arg Ala Gly Leu Leu Ala Leu Glu Phe Tyr Thr Pro Glu
545 550 555 560

Ala Phe Asn Trp Arg Gln Ala His Met Gln Ala Arg Phe Val Ile Leu
565 570 575

Arg Val Leu Leu Glu Ala Gly Glu Gly Leu Val Thr Ile Thr Pro Thr
580 585 590

Thr Gly Ser Asp Gly Arg Pro Asp Ala Arg Val Arg Leu Asp Arg Ser
595 600 605

Lys Ile Arg Ser Val Gly Lys Pro Ala Leu Glu Arg Phe Leu Arg Arg
610 615 620

Leu Gln Val Leu Lys Ser Thr Gly Asp Val Ala Gly Gly Arg Ala Leu
625 630 635 640

Tyr Glu Gly Tyr Ala Thr Val Thr Asp Ala Pro Pro Glu Cys Phe Leu
645 650 655

Thr Leu Arg Asp Thr Val Leu Leu Arg Lys Glu Ser Arg Lys Leu Ile
660 665 670

Val Gln Pro Asn Thr Arg Leu Glu Gly Ser Asp Val Gln Leu Leu Glu
675 680 685

Tyr Glu Ala Ser Ala Ala Gly Leu Ile Arg Ser Phe Ser Glu Arg Phe
690 695 700

Pro Glu Asp Gly Pro Glu Leu Glu Glu Ile Leu Thr Gln Leu Ala Thr
705 710 715 720

Ala Asp Ala Arg Phe Trp Lys Gly Pro Ser Glu Ala Pro Ser Gly Gln
725 730 735

Ala

<210> 35
<211> 21
<212> PRT
<213> Homo sapiens

<400> 35

Cys Glu Thr Val Ile Asn Pro Glu Thr Gly Glu Gln Ile Gln Ser Trp
1 5 10 15

Tyr Arg Ser Gly Glu
20

<210> 36
<211> 118
<212> PRT
<213> Homo sapiens

<400> 36

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

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

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

Gly Arg Ile Ile Pro Ile Leu Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr 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 Tyr Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 37
<211> 118
<212> PRT
<213> Homo sapiens

<400> 37

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

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

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

Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

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

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

Thr Glu Gly Tyr Glu Tyr Asp Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Leu Thr Val Ser Ser
115