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<110> Janssen Biotech, Inc.

<120> Human Oncostatin M Antibodies and Methods of Use

<130> CEN5306WOPCT

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<170> PatentIn version 3.5

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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


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


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


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


Xaa Met Xaa Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
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```
Ser Xaa Ile Xaa Xaa Xaa Gly Xaa Ser 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 Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Lys
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<400> 3

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

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Xaa Tyr
            20                  25                  30

Trp Ile Xaa Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
        35                  40                  45
```

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

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

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg

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

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1 5 10 15

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

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

Tyr Xaa Ala Ser Ser 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 Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys
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<400> 6

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 Xaa Xaa Xaa
20 25 30

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

Tyr Xaa 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
85

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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 Xaa Xaa Xaa
            20                  25                  30


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


Ile Tyr Xaa 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 Ser Leu Glu
65                  70                  75                  80


Pro Glu Asp Phe Ala Val Tyr Tyr Cys
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<400> 8

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1 5 10 15

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

Ser Asn Asn Xaa Asn Xaa Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile Tyr Xaa Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys
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1 5

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<400> 10

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

<210> 11
<211> 227
<212> PRT
<213> Homo sapiens

<400> 11

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln
1 5 10 15

Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp
20 25 30

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

Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly
50 55 60

Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys
65 70 75 80

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

Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln
100 105 110

Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met
115 120 125

Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly
130 135 140

Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe
145 150 155 160

Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe
165 170 175

Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn
180 185 190

Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg
195 200 205

Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln
210 215 220

Leu Pro Arg
225

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Ala Ala Met Gly Ser Cys Ser Lys Glu Tyr Arg Met Leu Leu Gly Gln
1 5 10 15

Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp
20 25 30

Pro Tyr Ile Arg Ile Gln Gly Leu Asp Ile Pro Lys Leu Arg Glu His
35 40 45

Cys Arg Glu Ser Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly
50 55 60

Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Arg
65 70 75 80

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

Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln
100 105 110

Met Ala Arg Pro Asn Val Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met
115 120 125

Ala Gln Leu Leu Asp Asn Ser Asp Met Thr Glu Pro Thr Lys Ala Gly
130 135 140

Arg Gly Thr Pro Gln Pro Pro Thr Pro Thr Pro Thr Ser Asp Val Phe
145 150 155 160

Gln Arg Lys Leu Glu Gly Cys Ser Phe Leu Arg Gly Tyr His Arg Phe
165 170 175

Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn

180 185 190

Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg
195 200 205

Arg Thr Arg Pro Ser Arg Lys Gly Asn Arg Leu Met Pro Arg Gly Gln
210 215 220

Leu Pro Arg
225

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Ser Tyr Ala Ile Ser
1 5

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Ser Tyr Trp Ile Ser
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Ser Tyr Trp Ile Gly
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<400> 16

Gly Ile Ile Pro Ile Phe Gly Asn Ala Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

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<400> 17

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

Gly

<210> 18
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<400> 18

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

Gly

<210> 19
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<400> 19

Tyr Gly Ala Lys Gly Leu Leu Asp Tyr
1 5

<210> 20
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Gly Ser Val Phe Glu Ala Tyr Phe Asp Tyr
1 5 10

<210> 21
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<400> 21

Val Pro Val Ser Pro Ala Tyr Leu Asp Tyr
1 5 10

<210> 22
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Gly Phe Gly Ala Ser Tyr Leu Asp Tyr
1 5

<210> 23
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Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu
1 5 10 15

Ala

<210> 24
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Lys Ser Ser Gln Ser Val Leu Ser Ser Ser Asn Asn Glu Asn Trp Leu
1 5 10 15

Ala

<210> 25
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Lys Ser Ser Gln Ser Val Leu Ala Ser Ser Asn Asn Asn Asn Phe Leu
1 5 10 15

Ala

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Trp Ala Ser Thr Arg Glu Ser
1 5

<210> 27
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Gln Gln Tyr Tyr Ser Thr Pro Leu
1 5

<210> 28
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Gln Gln Ser Phe Ser Phe Pro Ile
1 5

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Gln Gln Xaa Xaa Ser Xaa Pro Leu Thr
1 5

<210> 30
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<400> 30

Lys Ser Ser Gln Ser Val Leu Ser Ser Gly Asn Asn Gly Asn Tyr Leu
1 5 10 15

Ala

<210> 31
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<400> 31

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

Ala

<210> 32
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<400> 32

Lys Ser Ser Gln Ser Val Leu Ser Ser Arg Gly Asn Asn Asn Tyr Leu
1 5 10 15

Ala

<210> 33
<211> 17
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<213> Homo sapiens

<400> 33

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

Ala

<210> 34
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<213> Homo sapiens

<400> 34

Lys Ser Ser Gln Ser Val Leu Tyr Ser Gly Gly Asn Gly Asn Tyr Leu
1 5 10 15

Ala

<210> 35
<211> 17
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<400> 35

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

Ala

<210> 36
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<400> 36

Lys Ser Ser Gln Ser Val Leu Ser Ser Asn Gly Asn His Asn Tyr Leu

1 5 10 15

Ala

<210> 37
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<400> 37

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

Ala

<210> 38
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<400> 38

Lys Ser Ser Gln Ser Val Leu Gly Ser Ser Ser Asn Ile Asn Phe Leu
1 5 10 15

Ala

<210> 39
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<400> 39

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

Ala

<210> 40
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<400> 40

Lys Ser Ser Gln Ser Val Leu Gly Ser Gly Tyr Asn Arg Asn Tyr Leu
1 5 10 15

Ala

<210> 41

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<400> 41

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

Ala

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<400> 42

Lys Ala Ser Thr Arg Glu Ser
1 5

<210> 43
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<400> 43

Ser Ala Ser Thr Arg Glu Ser
1 5

<210> 44
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<400> 44

Asn Ala Ser Thr Arg Glu Ser
1 5

<210> 45
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<400> 45

Gln Gln Tyr Ser Thr Thr Pro Leu Thr
1 5

<210> 46
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<213> Homo sapiens

<400> 46

Gln Gln Tyr Phe Ser Thr Pro Ile Thr
1 5

<210> 47
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<400> 47

Gln Gln Tyr Xaa Ser Thr Pro Xaa Thr
1 5

<210> 48
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<400> 48

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

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30

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

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

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

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

<210> 49
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<400> 49

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

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

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

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

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65                  70                  75                  80

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

Tyr Tyr Ser Thr Pro Leu
            100
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<210> 50
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<400> 50

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

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

Asp Gly Asn His Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
        35                  40                  45

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

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65                  70                  75                  80

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

Tyr Tyr Ser Thr Pro Leu
            100
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<210> 51
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<400> 51

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

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

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

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

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

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

Tyr Phe Ser Thr Pro Ile
100

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<400> 52

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

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

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

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

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

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

Tyr Tyr Thr Thr Pro Leu
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<210> 53
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<213> Homo sapiens

<400> 53

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

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

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

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

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65                  70                  75                  80

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

Tyr Tyr Ser Thr Pro Leu
            100
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<400> 54

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

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
            20                  25                  30

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

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

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

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
                85                  90                  95

Ala Arg Gly Ser Val Phe Glu Ala Tyr Phe Asp Tyr
            100                 105
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<211> 108
<212> PRT
<213> Homo sapiens

<400> 55

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

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

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
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Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Val Pro Val Ser Pro Ala Tyr Leu Asp Tyr
100 105

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<211> 15
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<213> Artificial Sequence

<220>
<223> Consensus sequence for enzymatic biotinylation

<400> 56

Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu
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