SEQUENCE LISTING

<110> ELEVEN BIOTHERAPEUTICS

<120> CHIMERIC CYTOKINE FORMULATIONS FOR OCULAR DELIVERY

<130> D2046-7050WO

<140>
<141>

<150> 61/779,974
<151> 2013-03-13

<160> 23

<170> PatentIn version 3.5

<210> 1
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1

```
Ala Pro Val Arg Ser Leu Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1               5                  10                  15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
            20                  25                  30

Pro Asn Val Asn Leu Glu Glu Lys Ile Asp Val Ser Phe Val Gln Gly
        35                  40                  45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Ile His Gly Gly
    50                  55                  60

Lys Met Cys Leu Ser Cys Val Lys Ser Gly Asp Glu Thr Arg Leu Gln
65                  70                  75                  80

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

Arg Phe Ala Phe Ile Arg Ser Asp Ser Gly Pro Thr Thr Ser Phe Glu
            100                 105                 110

Ser Ala Ala Cys Pro Gly Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
        115                 120                 125

Gln Pro Val Ser Leu Thr Asn Met Pro Asp Glu Gly Val Met Val Thr
    130                 135                 140
```

Lys Phe Tyr Met Gln Phe Val Ser Ser
145 150

<210> 2
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2
Ala Pro Val Arg Ser Leu Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1 5 10 15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
20 25 30

Pro Asn Val Asn Leu Glu Glu Lys Ile Asp Val Ser Phe Val Gln Gly
35 40 45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Ile His Gly Gly
50 55 60

Lys Met Cys Leu Ser Cys Val Lys Ser Gly Asp Glu Thr Arg Leu Gln
65 70 75 80

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

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Ser Phe Glu
100 105 110

Ser Ala Ala Cys Pro Gly Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
115 120 125

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

Lys Phe Tyr Met Gln Phe Val Ser Ser
145 150

<210> 3
<211> 153
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 3

```
Ala Pro Val Arg Ser Leu Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1               5                   10                  15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
            20                  25                  30

Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
        35                  40                  45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
    50                  55                  60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
                85                  90                  95

Arg Phe Val Phe Ile Arg Ser Asp Ser Gly Pro Thr Thr Ser Phe Glu
            100                 105                 110

Ser Ala Ala Cys Pro Gly Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
        115                 120                 125

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

Lys Phe Thr Met Gln Phe Val Ser Ser
145                 150
```

<210> 4
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 4

```
Ala Pro Val Arg Ser Leu Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1               5                   10                  15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
            20                  25                  30
```

```
Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
        35                  40                  45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
    50                  55                  60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
                85                  90                  95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
            100                 105                 110

Ser Ala Ala Cys Pro Gly Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
        115                 120                 125

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

Lys Phe Thr Met Gln Phe Val Ser Ser
145                 150


<210> 5
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 5
Ala Pro Val Arg Ser Leu Asn Cys Arg Ile Trp Asp Val Asn Gln Lys
1               5                   10                  15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
            20                  25                  30

Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
        35                  40                  45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
    50                  55                  60

Asn Leu Tyr Leu Ser Cys Val Leu Lys Asp Asp Lys Pro Thr Leu Gln
65                  70                  75                  80
```

```
Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
                85                  90                  95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
            100                 105                 110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
        115                 120                 125

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

Lys Phe Tyr Met Gln Phe Val Ser Ser
145                 150


<210> 6
<211> 152
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 6
Ala Pro Val Arg Ser Leu Asn Cys Thr Leu Trp Asp Val Asn Gln Lys
1               5                   10                  15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
            20                  25                  30

Pro Asn Val Glu Gln Gln Val Val Phe Ser Met Ser Phe Val Gln Gly
        35                  40                  45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
    50                  55                  60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
                85                  90                  95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
            100                 105                 110

Ser Ala Gln Phe Pro Asn Trp Tyr Ile Ser Thr Ser Met Glu Ala Asp
        115                 120                 125
```

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


Phe Thr Met Gln Phe Val Ser Ser
145                 150


<210> 7
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 7
Ala Pro Val Arg Ser Leu Asn Cys Arg Ile Trp Asp Val Asn Gln Lys
1               5                   10                  15


Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
            20                  25                  30


Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
        35                  40                  45


Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
    50                  55                  60


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


Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
                85                  90                  95


Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
            100                 105                 110


Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
        115                 120                 125


Gln Pro Val Ser Leu Thr Asn Met Pro Asp Glu Gly Gln Asp Ile Thr
    130                 135                 140


Asp Phe Thr Met Gln Phe Val Ser Ser
145                 150


<210> 8
<211> 459
<212> DNA
```

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 8
gcacctgtac gatcactggc cttcagaatc tgggatgtta accagaagac cttctatctg 60

aggaacaacc aactagttgc tggatacttg caaggaccaa atgtcaattt agaagaaaag 120

atagatgtgt cctttgtaca aggagaagaa agtaatgaca aaatacctgt ggccttgggc 180

atccatggag ggaagatgtg cctgtcctgt gtcaagtctg gtgatgagac cagactccag 240

ctggaggcag ttgatcccaa aaattaccca aagaagaaga tggacaagcg cttcgccttc 300

atccgctcag acagcggccc caccaccagt tttgagtctg ccgcctgccc cggttggttc 360

ctctgcacag cgatggaagc tgaccagccc gtcagcctca ccaatatgcc tgacgaaggc 420

gtcatggtca ccaaattcta catgcaattt gtgtcttcc 459

<210> 9
<211> 459
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 9
gcacctgtac gatcactggc cttcagaatc tgggatgtta accagaagac cttctatctg 60

aggaacaacc aactagttgc tggatacttg caaggaccaa atgtcaattt agaagaaaag 120

atagatgtgt cctttgtaca aggagaagaa agtaatgaca aaatacctgt ggccttgggc 180

atccatggag ggaagatgtg cctgtcctgt gtcaagtctg gtgatgagac cagactccag 240

ctggaggcag ttgatcccaa aaattaccca aagaagaaga tggaaaagcg atttgtcttc 300

aacaagatag aaatcaataa caagctgagt tttgagtctg ccgcctgccc cggttggttc 360

ctctgcacag cgatggaagc tgaccagccc gtcagcctca ccaatatgcc tgacgaaggc 420

gtcatggtca ccaaattcta catgcaattt gtgtcttcc 459

<210> 10
<211> 459
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 10
gcacctgtac gatcactggc cttcagaatc tgggatgtta accagaagac cttctatctg 60

aggaacaacc aactagttgc tggatacttg caaggaccaa atgtcaattt agaagaaaag 120

ttctccatgt cctttgtaca aggagaagaa agtaatgaca aaatacctgt ggccttgggc 180

ctcaaggaaa agaatctgta cctgtcctgc gtgttgaaag atgataagcc cactctacag 240

ctggagagtg tagatcccaa aaattaccca aagaagaaga tggaaaagcg atttgtcttc 300

atccgctcag acagcggccc caccaccagt tttgagtctg ccgcctgccc cggttggttc 360

ctctgcacag cgatggaagc tgaccagccc gtcagcctca ccaatatgcc tgacgaaggc 420

gtcatggtca ccaaattcac catgcaattt gtgtcttcc 459

<210> 11
<211> 459
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 11
gcacctgtac gatcactggc cttcagaatc tgggatgtta accagaagac cttctatctg 60

aggaacaacc aactagttgc tggatacttg caaggaccaa atgtcaattt agaagaaaag 120

ttctccatgt cctttgtaca aggagaagaa agtaatgaca aaatacctgt ggccttgggc 180

ctcaaggaaa agaatctgta cctgtcctgc gtgttgaaag atgataagcc cactctacag 240

ctggagagtg tagatcccaa aaattaccca aagaagaaga tggaaaagcg atttgtcttc 300

aacaagatag aaatcaataa caagctggaa tttgagtctg ccgcctgccc cggttggttc 360

ctctgcacag cgatggaagc tgaccagccc gtcagcctca ccaatatgcc tgacgaaggc 420

gtcatggtca ccaaattcac catgcaattt gtgtcttcc 459

<210> 12
<211> 459
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 12
gcacctgtac gatcactgaa ctgcagaatc tgggatgtta accagaagac cttctatctg 60

aggaacaacc aactagttgc tggatacttg caaggaccaa atgtcaattt agaagaaaag 120

ttctccatgt cctttgtaca aggagaagaa agtaatgaca aaatacctgt ggccttgggc 180

ctcaaggaaa agaatctgta cctgtcctgc gtgttgaaag atgataagcc cactctacag 240

ctggagagtg tagatcccaa aaattaccca aagaagaaga tggaaaagcg atttgtcttc 300

aacaagatag aaatcaataa caagctggaa tttgagtctg cccagttccc caactggttc 360

ctctgcacag cgatggaagc tgaccagccc gtcagcctca ccaatatgcc tgacgaaggc 420

gtcatggtca ccaaattcta catgcaattt gtgtcttcc 459

<210> 13
<211> 456
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 13
gcacctgtac gatcactgaa ctgcacgctc tgggatgtta accagaagac cttctatctg 60

aggaacaacc aactagttgc tggatacttg caaggaccaa atgtcgagca acaagtggtg 120

ttctccatgt cctttgtaca aggagaagaa agtaatgaca aaatacctgt ggccttgggc 180

ctcaaggaaa agaatctgta cctgtcctgc gtgttgaaag atgataagcc cactctacag 240

ctggagagtg tagatcccaa aaattaccca aagaagaaga tggaaaagcg atttgtcttc 300

aacaagatag aaatcaataa caagctggaa tttgagtctg cccagttccc caactggtac 360

atcagcacct ctatggaagc tgaccagccc gtcttcctgg gagggaccaa aggcggccag 420

gatataactg acttcaccat gcaatttgtg tcttcc 456

<210> 14
<211> 459
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 14
gcacctgtac gatcactgaa ctgcagaatc tgggatgtta accagaagac cttctatctg 60

aggaacaacc aactagttgc tggatacttg caaggaccaa atgtcaattt agaagaaaag 120

ttctccatgt cctttgtaca aggagaagaa agtaatgaca aaatacctgt ggccttgggc 180

ctcaaggaaa agaatctgta cctgtcctgc gtgttgaaag atgataagcc cactctacag 240

ctggagagtg tagatcccaa aaattaccca aagaagaaga tggaaaagcg atttgtcttc 300

aacaagatag aaatcaataa caagctggaa tttgagtctg cccagttccc caactggttc 360

ctctgcacag cgatggaagc tgaccagccc gtcagcctca ccaatatgcc tgacgaaggc 420

caggatataa ctgacttcac catgcaattt gtgtcttcc 459

<210> 15
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 15
Ala Pro Val Arg Ser Leu Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1 5 10 15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
20 25 30

Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
35 40 45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
50 55 60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
85 90 95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
100 105 110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
115 120 125

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

Lys Phe Tyr Met Gln Phe Val Ser Ser
145 150

<210> 16
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 16
Ala Pro Val Arg Ser Gln Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1 5 10 15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
20 25 30

Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
35 40 45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
50 55 60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
85 90 95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
100 105 110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
115 120 125

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

Lys Phe Tyr Met Gln Phe Val Ser Ser
145 150

<210> 17
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 17
Ala Pro Val Arg Ser Leu Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1 5 10 15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
20 25 30

Pro Asn Val Asn Leu Glu Glu Lys Ile Asp Val Ser Phe Val Gln Gly

35 40 45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
50 55 60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
85 90 95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
100 105 110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
115 120 125

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

Lys Phe Tyr Met Gln Phe Val Ser Ser
145 150

<210> 18
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 18
Ala Pro Val Arg Ser Leu Asn Cys Arg Ile Trp Asp Val Asn Gln Lys
1 5 10 15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
20 25 30

Pro Asn Val Asn Leu Glu Glu Lys Ile Asp Val Ser Phe Val Gln Gly
35 40 45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
50 55 60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys

85 90 95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
100 105 110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
115 120 125

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

Lys Phe Tyr Met Gln Phe Val Ser Ser
145 150

<210> 19
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 19
Ala Pro Val Arg Ser Leu Asn Cys Arg Ile Trp Asp Val Asn Gln Lys
1 5 10 15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
20 25 30

Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
35 40 45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
50 55 60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
85 90 95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
100 105 110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
115 120 125

Gln Pro Val Ser Leu Thr Asn Met Pro Asp Glu Gly Val Met Val Thr

130 135 140

Lys Phe Thr Met Gln Phe Val Ser Ser
145 150

<210> 20
<211> 151
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 20
Ala Pro Val Arg Ser Leu Ala Phe Arg Ile Trp Asp Val Asn Gln Lys
1 5 10 15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
20 25 30

Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
35 40 45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
50 55 60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
85 90 95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
100 105 110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
115 120 125

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

Lys Phe Tyr Phe Gln Glu Asp
145 150

<210> 21
<211> 151
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 21
Ala Pro Val Arg Ser Leu Asn Cys Arg Ile Trp Asp Val Asn Gln Lys
1   5   10   15

Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly
            20   25   30

Pro Asn Val Asn Leu Glu Glu Lys Phe Ser Met Ser Phe Val Gln Gly
        35   40   45

Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu Lys
    50   55   60

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

Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu Lys
                85   90   95

Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe Glu
            100   105   110

Ser Ala Gln Phe Pro Asn Trp Phe Leu Cys Thr Ala Met Glu Ala Asp
        115   120   125

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

Lys Phe Tyr Phe Gln Glu Asp
145   150

<210> 22
<211> 165
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 22
Ser Ala Pro Phe Ser Phe Leu Ser Asn Val Lys Tyr Asn Phe Met Arg
1   5   10   15

Ile Ile Lys Tyr Glu Phe Arg Ile Trp Asp Val Asn Gln Lys Thr Phe
            20   25   30

```
Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly Pro Asn
        35                  40                  45

Val Asn Leu Glu Glu Lys Phe Asp Met Gly Ala Tyr Lys Ser Ser Lys
    50                  55                  60

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

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

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

Phe Trp Glu Thr His Gly Thr Lys Asn Tyr Phe Thr Ser Val Ala His
        115                 120                 125

Pro Asn Leu Phe Leu Cys Thr Ala Met Glu Ala Asp Gln Pro Val Ser
    130                 135                 140

Leu Thr Asn Met Pro Asp Glu Gly Val Met Val Thr Lys Phe Tyr Ile
145                 150                 155                 160

Leu Glu Asn Gln Ala
                165
```

<210> 23
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
6xHis tag"

<400> 23
His His His His His His
1   5