SEQUENCE LISTING

<110> BRISTOL-MYERS SQUIBB COMPANY

<120> STABLE FORMULATIONS OF FIBRONECTIN BASED SCAFFOLD DOMAIN PROTEINS THAT BIND TO MYOSTATIN

<130> MXI-607PC

<140> PCT/US2018/030851
<141> 2018-05-03

<150> US 62/500,649
<151> 2017-05-03

<160> 83

<170> PatentIn version 3.5

<210> 1
<211> 375
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(375)
<223> Human prepromyostatin

<400> 1

Met Gln Lys Leu Gln Leu Cys Val Tyr Ile Tyr Leu Phe Met Leu Ile
1 5 10 15

Val Ala Gly Pro Val Asp Leu Asn Glu Asn Ser Glu Gln Lys Glu Asn
20 25 30

Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
35 40 45

Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
50 55 60

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

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

Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
100 105 110

```
Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu
        115                 120                 125

Met Gln Val Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser
    130                 135                 140

Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu
145                 150                 155                 160

Arg Pro Val Glu Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
                165                 170                 175

Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
            180                 185                 190

Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val
        195                 200                 205

Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
    210                 215                 220

Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val Thr
225                 230                 235                 240

Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Lys
                245                 250                 255

Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys
            260                 265                 270

Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
        275                 280                 285

Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
    290                 295                 300

Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
305                 310                 315                 320

Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
                325                 330                 335

Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
            340                 345                 350
```

```
Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
        355                 360                 365


Val Asp Arg Cys Gly Cys Ser
    370                 375


<210>  2
<211>  352
<212>  PRT
<213>  Homo sapiens


<220>
<221>  misc_feature
<222>  (1)..(352)
<223>  Human pro-myostatin

<400>  2

Asn Glu Asn Ser Glu Gln Lys Glu Asn Val Glu Lys Glu Gly Leu Cys
1               5                   10                  15


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


Ile Lys Ile Gln Ile Leu Ser Lys Leu Arg Leu Glu Thr Ala Pro Asn
        35                  40                  45


Ile Ser Lys Asp Val Ile Arg Gln Leu Leu Pro Lys Ala Pro Pro Leu
    50                  55                  60


Arg Glu Leu Ile Asp Gln Tyr Asp Val Gln Arg Asp Asp Ser Ser Asp
65                  70                  75                  80


Gly Ser Leu Glu Asp Asp Asp Tyr His Ala Thr Thr Glu Thr Ile Ile
                85                  90                  95


Thr Met Pro Thr Glu Ser Asp Phe Leu Met Gln Val Asp Gly Lys Pro
            100                 105                 110


Lys Cys Cys Phe Phe Lys Phe Ser Ser Lys Ile Gln Tyr Asn Lys Val
        115                 120                 125


Val Lys Ala Gln Leu Trp Ile Tyr Leu Arg Pro Val Glu Thr Pro Thr
    130                 135                 140
```

```
Thr Val Phe Val Gln Ile Leu Arg Leu Ile Lys Pro Met Lys Asp Gly
145                 150                 155                 160

Thr Arg Tyr Thr Gly Ile Arg Ser Leu Lys Leu Asp Met Asn Pro Gly
                165                 170                 175

Thr Gly Ile Trp Gln Ser Ile Asp Val Lys Thr Val Leu Gln Asn Trp
            180                 185                 190

Leu Lys Gln Pro Glu Ser Asn Leu Gly Ile Glu Ile Lys Ala Leu Asp
        195                 200                 205

Glu Asn Gly His Asp Leu Ala Val Thr Phe Pro Gly Pro Gly Glu Asp
    210                 215                 220

Gly Leu Asn Pro Phe Leu Glu Val Lys Val Thr Asp Thr Pro Lys Arg
225                 230                 235                 240

Ser Arg Arg Asp Phe Gly Leu Asp Cys Asp Glu His Ser Thr Glu Ser
                245                 250                 255

Arg Cys Cys Arg Tyr Pro Leu Thr Val Asp Phe Glu Ala Phe Gly Trp
            260                 265                 270

Asp Trp Ile Ile Ala Pro Lys Arg Tyr Lys Ala Asn Tyr Cys Ser Gly
        275                 280                 285

Glu Cys Glu Phe Val Phe Leu Gln Lys Tyr Pro His Thr His Leu Val
    290                 295                 300

His Gln Ala Asn Pro Arg Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr
305                 310                 315                 320

Lys Met Ser Pro Ile Asn Met Leu Tyr Phe Asn Gly Lys Glu Gln Ile
                325                 330                 335

Ile Tyr Gly Lys Ile Pro Ala Met Val Val Asp Arg Cys Gly Cys Ser
            340                 345                 350
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<210> 3
<211> 109
<212> PRT
<213> Unknown

<220>
<223> Mature myostatin conserved in human, murine, rat, chicken,

turkey, dog, horse, and pig

<400> 3

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Asp Phe Gly Leu Asp Cys Asp Glu His Ser Thr Glu Ser Arg Cys Cys
1               5                   10                  15


Arg Tyr Pro Leu Thr Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile
            20                  25                  30


Ile Ala Pro Lys Arg Tyr Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu
        35                  40                  45


Phe Val Phe Leu Gln Lys Tyr Pro His Thr His Leu Val His Gln Ala
    50                  55                  60


Asn Pro Arg Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser
65                  70                  75                  80


Pro Ile Asn Met Leu Tyr Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly
                85                  90                  95


Lys Ile Pro Ala Met Val Val Asp Arg Cys Gly Cys Ser
            100                 105
```

<210> 4
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(94)
<223> Wild-type human fibronectin type III domain (10Fn3)

<400> 4

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Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1               5                   10                  15


Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg Tyr Tyr
            20                  25                  30


Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
        35                  40                  45


Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
    50                  55                  60
```

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

Ser Pro Ala Ser Ser Lys Pro Ile Ser Ile Asn Tyr Arg Thr
85 90

<210> 5
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin BC loop

<400> 5

Ser Trp Ser Leu Pro His Gln Gly Lys Ala Asn
1 5 10

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

<220>
<223> Synthetic: Anti-myostatin adnectin DE loop

<400> 6

Pro Gly Arg Gly Val Thr
1 5

<210> 7
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin FG loop

<400> 7

Thr Val Thr Asp Thr Gly Tyr Leu Lys Tyr Lys Pro
1 5 10

<210> 8
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin core

<400> 8

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

Pro His Gln Gly Lys Ala Asn Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr
20 25 30

Gly Gly Asn Ser Pro Val Gln Glu Phe Thr Val Pro Gly Arg Gly Val
35 40 45

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

Val Tyr Ala Val Thr Val Thr Asp Thr Gly Tyr Leu Lys Tyr Lys Pro
65 70 75 80

Ile Ser Ile Asn Tyr Arg Thr
85

<210> 9
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin core with N-terminal (AdNT1) (underlined) and C-terminal (AdCT1) (italics) terminal sequence with His6 tag

<400> 9

Met Gly Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr
1 5 10 15

Pro Thr Ser Leu Leu Ile Ser Trp Ser Leu Pro His Gln Gly Lys Ala
20 25 30

Asn Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val
35 40 45

Gln Glu Phe Thr Val Pro Gly Arg Gly Val Thr Ala Thr Ile Ser Gly
50 55 60

Leu Lys Pro Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Val
65 70 75 80

Thr Asp Thr Gly Tyr Leu Lys Tyr Lys Pro Ile Ser Ile Asn Tyr Arg
85 90 95

Thr Glu Ile Asp Lys Pro Ser Gln His His His His His His
100 105 110

<210> 10
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin core sequence preceded by N-terminal extension sequence(GVSDVPRDL) and followed by a C-terminal tail (EI))

<400> 10

Gly Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro
1 5 10 15

Thr Ser Leu Leu Ile Ser Trp Ser Leu Pro His Gln Gly Lys Ala Asn
20 25 30

Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln
35 40 45

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

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

Asp Thr Gly Tyr Leu Lys Tyr Lys Pro Ile Ser Ile Asn Tyr Arg Thr
85 90 95

Glu Ile

<210> 11
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT1

<400> 11

Met Gly Val Ser Asp Val Pro Arg Asp Leu

1 5 10

<210> 12
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT2

<400> 12

Gly Val Ser Asp Val Pro Arg Asp Leu
1 5

<210> 13
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT3

<400> 13

Val Ser Asp Val Pro Arg Asp Leu
1 5

<210> 14
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT4

<400> 14

Ser Asp Val Pro Arg Asp Leu
1 5

<210> 15
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT5

<400> 15

Asp Val Pro Arg Asp Leu
1 5

<210> 16
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT6

<400> 16

Val Pro Arg Asp Leu
1 5

<210> 17
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT7

<400> 17

Pro Arg Asp Leu
1

<210> 18
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT8

<400> 18

Arg Asp Leu
1

<210> 19
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary leader, AdNT9

<400> 19

Asp Leu
1

<210> 20
<211> 7
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT1

<400> 20

Glu Ile Asp Lys Pro Ser Gln
1   5

<210> 21
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT2

<400> 21

Glu Ile
1

<210> 22
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT3

<400> 22

Glu Ile Glu Pro Lys Ser Ser
1   5

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

<220>
<223> Synthetic: Exemplary tail, AdCT4

<400> 23

Glu Ile Asp Lys Pro Cys
1   5

<210> 24
<211> 5
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic: Exemplary tail, AdCT5

<400> 24

Glu Ile Asp Lys Pro
1   5

<210> 25
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT6

<400> 25

Glu Ile Asp Lys
1

<210> 26
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT7

<400> 26

Glu Ile Asp Lys Pro Ser
1   5

<210> 27
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT8

<400> 27

Glu Ile Glu Lys Pro Ser Gln
1   5

<210> 28
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT9

<400> 28

Glu Ile Asp Lys Pro Ser Gln Leu Glu
1   5

<210> 29
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT10

<400> 29

Glu Ile Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp
1   5   10

<210> 30
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT11

<400> 30

Glu Gly Ser Gly Ser
1   5

<210> 31
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT12

<400> 31

Glu Ile Asp Lys Pro Cys Gln
1   5

<210> 32
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT13

<400> 32

Gly Ser Gly Cys
1

<210> 33
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT14

<400> 33

Glu Gly Ser Gly Cys
1 5

<210> 34
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT15

<400> 34

Glu Ile Asp Lys Pro Cys Gln Leu Glu
1 5

<210> 35
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT16

<400> 35

Glu Ile Asp Lys Pro Ser Gln His His His His His His
1 5 10

<210> 36
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT17

<400> 36

Gly Ser Gly Cys His His His His His His
1 5 10

<210> 37

<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Exemplary tail, AdCT18

<400> 37

Glu Gly Ser Gly Cys His His His His His His
1 5 10

<210> 38
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Tag, T1

<400> 38

His His His His His His
1 5

<210> 39
<211> 227
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(227)
<223> human IgG1 immunoglobulin Fc domain

<400> 39

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

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
20 25 30

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
35 40 45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
50 55 60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
65 70 75 80

```
Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
                85                  90                  95


Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
            100                 105                 110


Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
        115                 120                 125


Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
    130                 135                 140


Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
145                 150                 155                 160


Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
                165                 170                 175


Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
            180                 185                 190


Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
        195                 200                 205


His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
    210                 215                 220


Pro Gly Lys
225


<210>  40
<211>  8
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Synthetic: linker sequence

<400>  40

Gly Ala Gly Gly Gly Gly Ser Gly
1               5


<210>  41
<211>  6
<212>  PRT
<213>  Artificial Sequence
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<220>
<223> Synthetic: linker sequence

<400> 41

Glu Pro Lys Ser Ser Asp
1   5

<210> 42
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 42

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

Ala Glu Gly Leu Ala
            20

<210> 43
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 43

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

Asp

<210> 44
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 44

Gly Gln Pro Asp Glu Pro Gly Gly Ser
1   5

<210> 45
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 45

Gly Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser
1 5 10

<210> 46
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 46

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

Glu

<210> 47
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 47

Gly Ser Gly Ser Gly
1 5

<210> 48
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 48

Gly Ser Gly Cys
1

<210> 49
<211> 7
<212> PRT
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<220>
<223> Synthetic: linker sequence

<400> 49

Ala Gly Gly Gly Gly Ser Gly
1 5

<210> 50
<211> 4
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<220>
<223> Synthetic: linker sequence

<400> 50

Gly Ser Gly Ser
1

<210> 51
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 51

Gln Pro Asp Glu Pro Gly Gly Ser
1 5

<210> 52
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 52

Gly Ser Gly Ser Gly Ser
1 5

<210> 53

<211> 6
<212> PRT
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<220>
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<400> 53

Thr Val Ala Ala Pro Ser
1 5

<210> 54
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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<400> 54

Lys Ala Gly Gly Gly Gly Ser Gly
1 5

<210> 55
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 55

Lys Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser
1 5 10

<210> 56
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 56

Lys Gln Pro Asp Glu Pro Gly Gly Ser
1 5

<210> 57
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 57

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

Leu Asp

<210> 58
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 58

Lys Thr Val Ala Ala Pro Ser
1   5

<210> 59
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 59

Lys Ala Gly Gly Gly Gly Ser Gly Gly
1   5

<210> 60
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 60

Lys Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly
1   5   10

<210> 61
<211> 10
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 61

Lys Gln Pro Asp Glu Pro Gly Gly Ser Gly
1 5 10

<210> 62
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 62

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

Leu Asp Gly

<210> 63
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 63

Lys Thr Val Ala Ala Pro Ser Gly
1 5

<210> 64
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 64

Ala Gly Gly Gly Gly Ser Gly Gly
1 5

<210> 65
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 65

Ala Gly Gly Gly Gly Ser Gly
1   5

<210> 66
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 66

Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly
1   5   10

<210> 67
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 67

Gln Pro Asp Glu Pro Gly Gly Ser Gly
1   5

<210> 68
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: linker sequence

<400> 68

Thr Val Ala Ala Pro Ser Gly
1   5

<210> 69
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: hinge sequence

<400> 69

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

<210> 70
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: hinge sequence

<400> 70

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

<210> 71
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: hinge sequence

<400> 71

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1   5   10   15

Pro Glu Leu Leu Gly Gly Pro Ser
            20

<210> 72
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: hinge sequence

<400> 72

Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
1   5   10   15

Pro Glu Leu Leu Gly Gly Ser Ser
            20

<210> 73
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: hinge sequence

<400> 73

Glu Pro Lys Ser Ser Gly Ser Thr His Thr Cys Pro Pro Cys Pro Ala
1 5 10 15

Pro Glu Leu Leu Gly Gly Ser Ser
20

<210> 74
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: hinge sequence

<400> 74

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

Gly Pro Ser

<210> 75
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: hinge sequence

<400> 75

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

Gly Ser Ser

<210> 76
<211> 330
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(330)
<223> heavy chain constant region of human IgG1

<400> 76

```
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
1               5                   10                  15


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


Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45


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


Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65                  70                  75                  80


Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85                  90                  95


Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
            100                 105                 110


Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
        115                 120                 125


Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
    130                 135                 140


Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145                 150                 155                 160


Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
                165                 170                 175


Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
            180                 185                 190


His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
        195                 200                 205
```

```
Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
    210                 215                 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225                 230                 235                 240

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
                245                 250                 255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
            260                 265                 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
        275                 280                 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
    290                 295                 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305                 310                 315                 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                325                 330
```

<210> 77
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: leader sequence

<400> 77

```
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1               5                   10                  15

Gly Ser Thr Gly
            20
```

<210> 78
<211> 340
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin Fc-Fusion

<400> 78

```
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1               5                  10                  15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
            20                  25                  30

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
        35                  40                  45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
    50                  55                  60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
65                  70                  75                  80

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
                85                  90                  95

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
            100                 105                 110

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
        115                 120                 125

Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
    130                 135                 140

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
145                 150                 155                 160

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
                165                 170                 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
            180                 185                 190

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
        195                 200                 205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
    210                 215                 220

Pro Glu Leu Gln Leu Glu Glu Ser Ala Ala Glu Ala Gln Glu Gly Glu
```

225 230 235 240

Leu Glu Gly Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala
245 250 255

Thr Pro Thr Ser Leu Leu Ile Ser Trp Ser Leu Pro His Gln Gly Lys
260 265 270

Ala Asn Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro
275 280 285

Val Gln Glu Phe Thr Val Pro Gly Arg Gly Val Thr Ala Thr Ile Ser
290 295 300

Gly Leu Lys Pro Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr
305 310 315 320

Val Thr Asp Thr Gly Tyr Leu Lys Tyr Lys Pro Ile Ser Ile Asn Tyr
325 330 335

Arg Thr Glu Ile
340

<210> 79
<211> 330
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin Fc-Fusion

<400> 79

Gly Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro
1 5 10 15

Thr Ser Leu Leu Ile Ser Trp Ser Leu Pro His Gln Gly Lys Ala Asn
20 25 30

Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln
35 40 45

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

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

```
Asp Thr Gly Tyr Leu Lys Tyr Lys Pro Ile Ser Ile Asn Tyr Arg Thr
                85                  90                  95

Glu Ile Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys
            100                 105                 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
        115                 120                 125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
    130                 135                 140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145                 150                 155                 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
                165                 170                 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
            180                 185                 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
        195                 200                 205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
    210                 215                 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225                 230                 235                 240

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
                245                 250                 255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
            260                 265                 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
        275                 280                 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
    290                 295                 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
```

305 310 315 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
325 330

<210> 80
<211> 206
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(206)
<223> human IgG1 CH2 and CH3 region

<400> 80

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
1 5 10 15

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
20 25 30

Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
35 40 45

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
50 55 60

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
65 70 75 80

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr
85 90 95

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
100 105 110

Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
115 120 125

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
130 135 140

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
145 150 155 160

```
Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
                165                 170                 175


Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
            180                 185                 190


Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
        195                 200                 205


<210>  81
<211>  20
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Synthetic: exemplary N-terminal leader sequence for production of
       polypeptides in a mammalian system

<400>  81

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1               5                   10                  15


Gly Ser Thr Gly
            20


<210>  82
<211>  900
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  Synthetic: Anti-myostatin adnectin Fc-Fusion

<400>  82
tgcgtggtgg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac       60

ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagtacaa cagcacgtac      120

cgtgtggtca gcgtcctcac cgtcctgcac caggactggc tgaatggcaa ggagtacaag      180

tgcaaggtct ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa      240

gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggatga gctgaccaag      300

aaccaggtca gcctgacctg cctggtcaaa ggcttctatc ccagcgacat cgccgtggag      360

tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc      420

gacggctcct tcttcctcta cagcaagctc accgtggaca agagcaggtg gcagcagggg      480

aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc      540
```

ctctccctgt ctcccgagct gcagctggag gaaagcgccg ctgaggctca ggaaggagaa 600

ctggaaggcg tgagcgacgt gccacgggat ctagaagtgg tggctgctac ccccacaagc 660

ttgctgatca gctggtctct gccgcaccaa ggtaaagcca attattaccg catcacttac 720

ggcgaaacag gaggcaatag ccctgtccag gagttcactg tgcctggtcg tggtgttaca 780

gctaccatca gcggccttaa acctggcgtt gattatacca tcactgtgta tgctgtcact 840

gttactgata cagggtacct caagtacaaa ccaatttcca ttaattaccg gaccgaaatt 900

<210> 83
<211> 990
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic: Anti-myostatin adnectin Fc-Fusion

<400> 83
ggcgtgagcg acgtgccccg ggatctagaa gtggtggctg ctacccccac aagcttgctg 60

atcagctggt ctctgccgca ccaaggtaaa gccaattatt accgcatcac ttacggcgaa 120

acaggaggca atagccctgt ccaggagttc actgtgcctg gtcgtggtgt tacagctacc 180

atcagcggcc ttaaacctgg cgttgattat accatcactg tgtatgctgt cactgttact 240

gatacagggt acctcaagta caaaccaatt tccattaatt accggaccga aattgagcct 300

aagagctccg acaaaaccca cacatgccca ccttgtccag cccccgaact gctgggcggc 360

ccttcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggacccct 420

gaggtcacat gcgtggtggt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg 480

tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac 540

agcacgtacc gtgtggtcag cgtcctcacc gtcctgcacc aggactggct gaatggcaag 600

gagtacaagt gcaaggtctc caacaaagcc ctcccagccc ccatcgagaa aaccatctcc 660

aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgcccccatc ccgggatgag 720

ctgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctatcc cagcgacatc 780

gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg 840

ttggactccg acggctcctt cttcctctac agcaagctca ccgtggacaa gagcaggtgg 900

cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg 960

cagaagagcc tctccctgtc tcccgggaaa 990