

SEQUENCE LISTING

<110> Opko Biologics Ltd.
 <120> LONG-ACTING GROWTH HORMONE AND METHODS OF PRODUCING SAME
 <130> SG4417A
 <140> PCT/US12/999999
 <141> 2012-08-01
 <150> 12/476,916
 <151> 2009-06-02
 <150> 13/195,931
 <151> 2011-08-02
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 <150> 12/476,916
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 <151> 2009-03-11
 <150> 11/700,910
 <151> 2007-02-01
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 <151> 2006-02-03
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 1 5 10 15
 Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu
 20 25 30
 Gln
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 <213> Homo sapiens
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 1 5 10 15
 Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro Gln
 20 25

<210> 3
<211> 26
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<213> Homo sapiens

<400> 3

Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
1 5 10 15

Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala
20 25

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

<400> 4

Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu Pro
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<210> 5
<211> 217
<212> PRT
<213> Homo sapiens

<400> 5

Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
1 5 10 15

Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Phe Pro Thr Ile Pro Leu
20 25 30

Ser Arg Leu Phe Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln
35 40 45

Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys
50 55 60

Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe
65 70 75 80

Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys
85 90 95

Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp
100 105 110

Leu Glu Pro Val Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val
115 120 125

Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu
130 135 140

Glu Gly Ile Gln Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg
145 150 155 160

Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser
165 170 175

His Asn Asp Asp Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe
180 185 190

Arg Lys Asp Met Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys
195 200 205

Arg Ser Val Glu Gly Ser Cys Gly Phe
210 215

<210> 6
<211> 192
<212> PRT
<213> Homo sapiens

<400> 6

Met Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu
1 5 10 15

Arg Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe
20 25 30

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

Pro Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn
50 55 60

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

Leu Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser
85 90 95

Val Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr
100 105 110

Asp Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg
115 120 125

Leu Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr
130 135 140

Ser Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn
145 150 155 160

Tyr Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr
Page 3

Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser
165 170 175

His Asn Asp Asp Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe
180 185 190

Arg Lys Asp Met Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys
195 200 205

Arg Ser Val Glu Gly Ser Cys Gly Phe
210 215

<210> 9
<211> 245
<212> PRT
<213> Homo sapiens

<400> 9

Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
1 5 10 15

Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Phe Pro Thr Ile Pro Leu
20 25 30

Ser Arg Leu Phe Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln
35 40 45

Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys
50 55 60

Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe
65 70 75 80

Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys
85 90 95

Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp
100 105 110

Leu Glu Pro Val Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val
115 120 125

Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu
130 135 140

Glu Gly Ile Gln Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg
145 150 155 160

Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser
165 170 175

His Asn Asp Asp Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe
180 185 190

Arg Lys Asp Met Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys
195 200 205

Arg Ser Val Glu Gly Ser Cys Gly Phe Ser Ser Ser Ser Lys Ala Pro
210 215 220

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
225 230 235 240

Pro Ile Leu Pro Gln
245

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

<400> 10

Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
1 5 10 15

Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Phe Pro Thr Ile Pro Leu
20 25 30

Ser Arg Leu Phe Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln
35 40 45

Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys
50 55 60

Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe
65 70 75 80

Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys
85 90 95

Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp
100 105 110

Leu Glu Pro Val Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val
115 120 125

Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu
130 135 140

Glu Gly Ile Gln Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg
145 150 155 160

Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser
165 170 175

His Asn Asp Asp Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe
 180 185 190
 Arg Lys Asp Met Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys
 195 200 205
 Arg Ser Val Glu Gly Ser Cys Gly Phe Ser Ser Ser Ser Lys Ala Pro
 210 215 220
 Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
 225 230 235 240
 Pro Ile Leu Pro Gln Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu
 245 250 255
 Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro
 260 265 270

Gln

<210> 11
 <211> 301
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 <213> Homo sapiens

<400> 11

Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
 1 5 10 15
 Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Ser Ser Ser Ser Lys Ala
 20 25 30
 Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp
 35 40 45
 Thr Pro Ile Leu Pro Gln Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe
 50 55 60
 Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln Leu Ala Phe Asp
 65 70 75 80
 Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr
 85 90 95
 Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile
 100 105 110
 Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu
 115 120 125
 Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp Leu Glu Pro Val
 130 135 140

Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser
 145 150 155 160
 Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln
 165 170 175
 Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile
 180 185 190
 Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser His Asn Asp Asp
 195 200 205
 Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met
 210 215 220
 Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys Arg Ser Val Glu
 225 230 235 240
 Gly Ser Cys Gly Phe Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu
 245 250 255
 Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro
 260 265 270
 Gln Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser
 275 280 285
 Arg Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro Gln
 290 295 300

<210> 12
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Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
 1 5 10 15
 Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Ser Ser Ser Ser Lys Ala
 20 25 30
 Pro Pro Pro Ser Leu Pro Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe
 35 40 45
 Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln Leu Ala Phe Asp
 50 55 60
 Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr
 65 70 75 80

Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile
85 90 95

Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu
100 105 110

Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp Leu Glu Pro Val
115 120 125

Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser
130 135 140

Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln
145 150 155 160

Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile
165 170 175

Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser His Asn Asp Asp
180 185 190

Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met
195 200 205

Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys Arg Ser Val Glu
210 215 220

Gly Ser Cys Gly Phe Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu
225 230 235 240

Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro
245 250 255

Gln Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser
260 265 270

Arg Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro Gln
275 280 285

<210> 13
<211> 273
<212> PRT
<213> Homo sapiens

<400> 13

Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
1 5 10 15

Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Ser Ser Ser Ser Lys Ala
20 25 30

Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp
35 40 45

Thr Pro Ile Leu Pro Gln Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe
 50 55 60
 Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln Leu Ala Phe Asp
 65 70 75 80
 Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr
 85 90 95
 Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile
 100 105 110
 Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu
 115 120 125
 Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp Leu Glu Pro Val
 130 135 140
 Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser
 145 150 155 160
 Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln
 165 170 175
 Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile
 180 185 190
 Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser His Asn Asp Asp
 195 200 205
 Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met
 210 215 220
 Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys Arg Ser Val Glu
 225 230 235 240
 Gly Ser Cys Gly Phe Ser Ser Ser Ser Lys Ala Pro Pro Pro Ser Leu
 245 250 255
 Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr Pro Ile Leu Pro
 260 265 270

Gln

<210> 14
 <211> 245
 <212> PRT
 <213> Homo sapiens
 <400> 14

Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
 1 5 10 15
 Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Ser Ser Ser Ser Lys Ala
 20 25 30
 Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp
 35 40 45
 Thr Pro Ile Leu Pro Gln Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe
 50 55 60
 Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln Leu Ala Phe Asp
 65 70 75 80
 Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr
 85 90 95
 Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile
 100 105 110
 Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu
 115 120 125
 Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp Leu Glu Pro Val
 130 135 140
 Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser
 145 150 155 160
 Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln
 165 170 175
 Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile
 180 185 190
 Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser His Asn Asp Asp
 195 200 205
 Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met
 210 215 220
 Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys Arg Ser Val Glu
 225 230 235 240
 Gly Ser Cys Gly Phe
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<210> 15
 <211> 853
 <212> DNA
 <213> Homo sapiens

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gcccagcccc agcagactgc cgggccccag cgacacaccc attctgcccc agttccccac 180
catccccctg agcaggctgt tcgacaacgc catgctgagg gctcacaggc tgcaccagct 240
ggcctttgac acctaccagg agttcgagga agcctacatc cccaaggagc agaagtacag 300
cttcctgcag aacccccaga cctccctgtg cttcagcgag agcatcccca cccccagcaa 360
cagagaggag acccagcaga agagcaacct ggagctgctg aggatctccc tgctgctgat 420
ccagagctgg ctggagcccc tgcagttcct gagaagcgtg ttcgccaaca gcctggtgta 480
cggcgccagc gacagcaacg tgtacgacct gctgaaggac ctggaggagg gcatccagac 540
cctgatgggc cggctggagg acggcagccc caggaccggc cagatcttca agcagacct 600
cagcaagtgc gacaccaaca gccacaacga cgacgccctg ctgaagaact acgggctgct 660
gtactgcttc agaaaggaca tggacaaggt ggagaccttc ctgaggatcg tgcagtgcag 720
aagcgtggag ggcagctgcg gcttcagctc cagcagcaag gcccctcccc cgagcctgcc 780
ctccccaagc aggctgcctg ggccctccga cacaccaatc ctgcctcagt gatgaaggtc 840
tggatgcggc cgc 853

<210> 16
<211> 937
<212> DNA
<213> Homo sapiens

<400> 16
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cctgccatgg ctgcaggagg gcagcgccag ctcttcttct aaggctccac ccccatctct 120
gcccagcccc agcagactgc cgggccccag cgacacaccc attctgcccc agttccccac 180
catccccctg agcaggctgt tcgacaacgc catgctgagg gctcacaggc tgcaccagct 240
ggcctttgac acctaccagg agttcgagga agcctacatc cccaaggagc agaagtacag 300
cttcctgcag aacccccaga cctccctgtg cttcagcgag agcatcccca cccccagcaa 360
cagagaggag acccagcaga agagcaacct ggagctgctg aggatctccc tgctgctgat 420
ccagagctgg ctggagcccc tgcagttcct gagaagcgtg ttcgccaaca gcctggtgta 480
cggcgccagc gacagcaacg tgtacgacct gctgaaggac ctggaggagg gcatccagac 540
cctgatgggc cggctggagg acggcagccc caggaccggc cagatcttca agcagacct 600
cagcaagtgc gacaccaaca gccacaacga cgacgccctg ctgaagaact acgggctgct 660
gtactgcttc agaaaggaca tggacaaggt ggagaccttc ctgaggatcg tgcagtgcag 720
aagcgtggag ggcagctgcg gcttcagctc cagcagcaag gcccctcccc cgagcctgcc 780
ctccccaagc aggctgcctg ggccctccga cacaccaatc ctgccacaga gcagctcctc 840
taaggccccct cctccatccc tgccatcccc ctcccggtg cctggccccct ctgacacccc 900
tatcctgcct cagtgatgaa ggtctggatg cggccgc 937

<210> 17
 <211> 889
 <212> DNA
 <213> Homo sapiens

 <400> 17
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 cctgccatgg ctgcaggagg gcagcgccag ctcttcttct aaggctccac ccccgagcct 120
 gcccttcccc accatcccc tgagcaggct gtctgacaac gccatgctga gggctcacag 180
 gctgcaccag ctggcctttg acacctacca ggagttcgag gaagcctaca tccccaagga 240
 gcagaagtac agcttcctgc agaaccacca gacctccctg tgcttcagcg agagcatccc 300
 cacccccagc aacagagagg agaccagca gaagagcaac ctggagctgc tgaggatctc 360
 cctgctgctg atccagagct ggctggagcc cgtgcagttc ctgagaagcg tgttcgcaa 420
 cagcctggtg tacggcgcca gcgacagca cgtgtacgac ctgctgaagg acctggagga 480
 gggcatccag accctgatgg gccggctgga ggacggcagc cccaggaccg gccagatctt 540
 caagcagacc tacagcaagt tcgacacaa cagccacaac gacgacgcc tgctgaagaa 600
 ctacgggctg ctgtactgct tcagaaagga catggacaag gtggagacct tcctgaggat 660
 cgtgcagtg cagaagcgtg agggcagctg cggcttcagc tccagcagca agggccctcc 720
 cccgagcctg ccttcccaa gcaggctgcc tgggccctcc gacacacaa tcctgccaca 780
 gagcagctcc tctaaggccc ctctccatc cctgccatcc cctcccggc tgctggcccc 840
 ctctgacacc cctatcctgc ctcagtgatg aaggctctga tgcggccgc 889

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 <213> Artificial Sequence

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 <223> XbaI Forward primer for HGH-CTP constructs

<400> 18
 ctctagagga catggccac 19

<210> 19
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Reverse primer for HGH-CTP constructs

<400> 19
 acagggaggt ctgggggttc tgca 24

<210> 20
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Forward primer for HGH-CTP constructs
 <400> 20
 tgcagaaccc ccagacctcc ctgtgc 26

<210> 21
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Reverse primer for HGH-CTP constructs
 <400> 21
 ccaaaactcat caatgtatct ta 22

<210> 22
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> XbaI Forward primer for HGH-CTP constructs
 <400> 22
 ctctagagga catggccac 19

<210> 23
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Reverse primer for HGH-CTP constructs
 <400> 23
 cgaactcctg gtaggtgtca aaggc 25

<210> 24
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Forward primer for HGH-CTP constructs
 <400> 24
 gcctttgaca cctaccagga gttcg 25

<210> 25
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Reverse primer for HGH-CTP constructs
 <400> 25
 acgcggccgc atccagacct tcatcactga ggc 33

<210> 26
 <211> 34
 <212> DNA

<213> Artificial Sequence

<220>

<223> Reverse primer for HGH-CTP constructs

<400> 26

gcggccgcgg actcatcaga agccgcagct gccc

34