

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25
SEQUENCE LISTING

<110> CYTOMX THERAPEUTICS, INC.

<120> ANTI-PDL1 ANTIBODIES, ACTIVATABLE ANTI-PDL1 ANTIBODIES, AND
METHODS OF USE THEREOF

<130> CYTM-038/N02SG 322001-2390

<150> PCT/US2016/022345

<151> 2016-03-14

<150> US 62/218,883

<151> 2015-09-15

<150> US 62/139,596

<151> 2015-03-27

<150> US 62/133,231

<151> 2015-03-13

<160> 1203

<170> PatentIn version 3.5

<210> 1

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcc tgagctgggt ccgccaggct 120

ccaggaagg ggctggagtg ggtctcagat attactgct cgggtagag gacaacgtac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gagatcgaag 300

attgctttg actactgggg ccaggaacc ctggtcaccg tctcagcgg tggaggcgg 360

tcaggcggag gtggcagcgg cgggtggcggg tcgacggaca tccagatgac ccagtctcca 420

tcctccctgt ctgcatctgt aggagacaga gtcacatca cttgccgggc aagtcagagc 480

attagcagct attaaattg gtatcagcag aaaccaggga aagcccctaa gctcctgac 540

tataaggcat cccgtttgca aagtggggc ccatcaaggt tcagtggcag tggatctggg 600

acagattca ctctacatc cagcagctg caacctgaag attttgcaac ttactactgt 660

caacagcgtg cgcttaagcc tgtgacgttc ggccaaggga ccaagggtga aatcaaacgg 720

<210> 2

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 2

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 Ser Tyr
 20 25 30

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

Ser Asp Ile Thr Ala Ser Gly Gln Arg Thr Thr 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
 85 90 95

Ala Arg Ser Lys Ile Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125

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

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
 145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
 165 170 175

Lys Leu Leu Ile Tyr Lys Ala Ser Arg Leu Gln Ser Gly Val Pro Ser
 180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
 195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Arg Ala
 Page 2

210

215

220

Leu Lys Pro Val Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 225 230 235 240

<210> 3

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 3

gaggtgcagc tgttgagtc tgggggaggc ttggtacagc ctgggggggc cctgagacta 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccagggaagg ggctggagtg ggtctcaagt attaataagg atggtcatta tacaagttac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaaaatctt 300

gatgagtttg actactgggg ccagggaacc ctggtcaccg tctcgagcgg tggaggcggg 360

tcaggcggag gtggcagcgg cgggtggcggg tcgacggaca tccagatgac ccagtcacca 420

tcctccctgt ctgcatctgt aggagacaga gtcacatca cttgccgggc aagtcagagc 480

attagcagct atttaaattg gtatcagcag aaaccaggga aagcccctaa gctcctgatc 540

tatgtctcat ccagtttgca aagtgggggc ccatcaagggt tcagtggcag tggatctggg 600

acagatttca ctctcaccat cagcagtctg caacctgaag attttgaac ttactactgt 660

caacagagtt acagtacccc taatacgttc ggccaaggga ccaagggtgga aatcaaacgg 720

<210> 4

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 4

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Asn Lys Asp Gly His Tyr Thr Ser 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
 85 90 95

Ala Lys Asn Leu Asp Glu Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125

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

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
 145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
 165 170 175

Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
 180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
 195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr
 210 215 220

Ser Thr Pro Asn Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 225 230 235 240

<210> 5

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 5

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctgggggggc cctgagactc 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

tcctgtgcag cctctggatt caccttagc agctatgcc ttagctgggt ccgccaggct 120

ccaggggaagg ggctggagtg ggtctcatct attatggcta ctggtgctgg tacattgtac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaata acagcctgag agccgaggac acggccgtat attactgtgc gaaagatggt 300

gcgggggttg actactgggg ccaggggaacc ctggtcaccg tctcgagcgg tggaggcgggt 360

tcaggcggag gtggcagcgg cgggtggcggg tcgacggaca tccagatgac ccagtctcca 420

tcctccctgt ctgcatctgt aggagacaga gtcaccatca ctgcccgggc aagtcagagc 480

attagcagct attaaattg gtatcagcag aaaccaggga aagcccctaa gctcctgac 540

tattctgcat cccagttgca aagtgggggt ccatcaaggt tcagtggcag tggatctggg 600

acagatttca ctctaccat cagcagtctg caacctgaag attttgaac ttactactgt 660

caacaggcga attcgcgcc ttctacgttc ggccaaggga ccaaggtgga aatcaaacgg 720

<210> 6

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 6

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 Ser Tyr
20 25 30

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

Ser Ser Ile Met Ala Thr Gly Ala Gly Thr Leu 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
85 90 95

Ala Lys Asp Gly Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly
 115 120 125

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

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
 145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
 165 170 175

Lys Leu Leu Ile Tyr Ser Ala Ser Gln Leu Gln Ser Gly Val Pro Ser
 180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
 195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn
 210 215 220

Ser Arg Pro Ser Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 225 230 235 240

<210> 7

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 7

gagggtgcagc tgttgagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggggaagg ggctgtagtg ggtctcaact attacttctt ctggtgctgc tacatattac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaaaattat 300

actggttttg actactgggg ccaggggaacc ctggtcaccg tctcgagcgg tggaggcgg 360

tcaggcggag gtggcagcgg cgggtggcggg tcgacggaca tccagatgac ccagttcca 420

tcctccctgt ctgcatctgt aggagacaga gtcacatca cttgccgggc aagtcagagc 480

attagcagct atttaaattg gtatcagcag aaaccaggga aagcccctaa gctcctgatc 540

tataatgcat cctccttgca aagtgggggc ccatcaaggt tcagtggcag tggatctggg 600

acagatttca ctctcaccat cagcagtctg caacctgaag attttgcaac ttactactgt 660

caacagtata cttatgggcc tggtagcttc ggccaaggga ccaaggtgga aatcaaacgg 720

<210> 8

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 8

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 Ser Tyr
20 25 30

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

Ser Thr Ile Thr Ser Ser Gly Ala Ala 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
85 90 95

Ala Lys Asn Tyr Thr Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

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

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Asn Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
180 185 190

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Thr
210 215 220

Tyr Gly Pro Gly Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
225 230 235 240

<210> 9

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 9

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggaagg ggctggagtg ggtctcaagt attattcta ctggtggtgc tacagcttac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaata acagcctgag agccgaggac acggccgtat attactgtgc gaaatcttct 300

gctggtttg actactgggg ccaggaacc ctggtcaccg tctcgagcgg tggaggcgg 360

tcaggcggag gtggcagcgg cgggtggcggg tcgacggaca tccagatgac ccagtctcca 420

tcctcctgt ctgcatctgt aggagacaga gtcaccatca ctgccgggc aagtcagagc 480

attagcagct attaaattg gtatcagcag aaaccaggga aagcccctaa gctcctgac 540

tattatgcat ccacttgca aagtggggtc ccatcaaggt tcagtggcag tggatctggg 600

acagattca ctctaccat cagcagtctg caacctgaag attttgcaac ttactactgt 660

caacaggata atggttatcc ttctacgttc ggccaaggga ccaaggtgga aatcaaacgg 720

<210> 10

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 10

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

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

Ser Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala 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
85 90 95

Ala Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

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

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Tyr Ala Ser Thr Leu Gln Ser Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn
210 215 220

Gly Tyr Pro Ser Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
225 230 235 240

<210> 11

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 11

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120

gggaaagccc ctaagctcct gatctattat gcatccactt tgcaaagtgg ggtcccatca 180

aggttcagtg gcagtggtatc tgggacagat ttactctca ccatcagcag tctgcaacct 240

gaagattttg caacttacta ctgtcaacag gataatgggt atccttctac gttcggccaa 300

gggaccaagg tggaatcaa acgg 324

<210> 12

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 12

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

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

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

Tyr Tyr Ala Ser Thr 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 Gln Gln Asp Asn Gly Tyr Pro Ser
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 13

<211> 360

<212> DNA

<213> Artificial Sequence

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<220>

<223> chemically synthesized

<400> 13

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggggaagg ggctggagtg ggtctcaagt attattcta ctgggtgtgc tacagcttac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatac acagcctgag agccgaggac acggccgtat attactgtgc gaaatcttct 300

gctggtagtc ggccgggttt tgactactgg ggccagggaa ccctgggtcac cgtctcgagc 360

<210> 14

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 14

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala 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
 85 90 95

Ala Lys Ser Ser Ala Gly Gln Ser Arg Pro Gly Phe Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 15

<211> 360

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 15

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctgggggggc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggaagg ggctggagtg ggtctcaagt attattcta ctggtggtgc tacagcttac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaata acagcctgag agccgaggac acggccgtat attactgtgc gaaatcttct 300

gctggttcgt ggccgggttt tgactactgg ggccagggaa ccctggtcac cgtctcgagc 360

<210> 16

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 16

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 17
 <211> 363
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 17
 gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
 tcctgtcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
 ccaggaagg ggctggagtg ggtctcaagt attattcta ctggtggtgc tacagcttac 180
 gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaata acagcctgag agccgaggac acggccgtat attactgtgc gaaatcttct 300
 gctggtcagt cgttccggg ttgtactac tggggccagg gaaccctggt caccgtctcg 360
 agc 363

<210> 18
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 18
 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 Ser Tyr
 20 25 30
 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala 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
 85 90 95
 Ala Lys Ser Ser Ala Gly Gln Ser Phe Pro Gly Phe Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 19
 <211> 348
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 19
 gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtctcaagt attattcta ctggtggtgc tacagcttac 180
 gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaataa acagcctgag agccgaggac acggccgtat attactgtgc gaaatggtct 300
 gctgcttttg actactgggg ccaggggaacc ctggtcaccg tctcgagc 348

<210> 20
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 20

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala 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
 85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ala Lys Trp Ser Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser
115

<210> 21
<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 21
gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctgggggggc cctgagactc 60
tcctgtgcag cctctggatt caccttagc agctatgcc ttagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtctcaagt attattcta ctggtggtgc tacagcttac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaatggtct 300
gctgcttttg actactgggg ccaggggaacc ctggtcaccg tctcgagc 348

<210> 22
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 22

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 Ser Tyr
20 25 30

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

Ser Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala 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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Ala Lys Trp Ser Ala Gly Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser
 115

<210> 23
 <211> 348
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 23
 gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctgggggggc cctgagactc 60
 tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
 ccaggaagg ggctggagtg ggtctcaagt attattcta ctggtggtgc tacagcttac 180
 gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cagctgtat 240
 ctgcaaatga acagctgag agccgaggac acggccgtat attactgtgc gaaatggtct 300
 aagggttttg actactgggg ccaggaacc ctggtcaccg tctcgagc 348

<210> 24
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 24

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 Page 16

65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

 85 90 95

Ala Lys Trp Ser Lys Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val

 100 105 110

Thr Val Ser Ser

 115

<210> 25
 <211> 352
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 25
 gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctgggggggc cctgagactc 60
 tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtctcaagt atttgaagt agggatttgt gacagtgagc 180
 ttacgcagac tccgtgaagg gccgggtcac catctccaga gacaattcca agaacacgct 240
 gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300
 ttctgctggt ttgactact ggggccaggg aaccctggtc accgtctcga gc 352

<210> 26
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 26

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 Ser Tyr

 20 25 30

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

 35 40 45

Ser Ser Ile Trp Lys Gln Gly Ile Val Thr Val Tyr Asp Ser Val Lys

 50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val

<210> 27

<211> 352

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 27

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggggaagg ggctggagtg ggtctcaagt attggcggga atggattgt tacagtttagc 180

ttacgcagac tccgtgaagg gccggttcac catctccaga gacaattcca agaacacgct 240

gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300

ttctgctggt ttgactact ggggccaggg aaccctggtc accgtctcga gc 352

<210> 28

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 28

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 Ser Tyr
20 25 30

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val Tyr Asp Ser Val Lys
50 55 60

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 29
<211> 352
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 29
gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtctcagat atttgaagt agggatatgt tacagtgagc 180
ttacgcagac tccgtgaagg gccggtcac catctccaga gacaattcca agaacacgct 240
gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300
ttctgctggt ttgactact ggggccaggg aaccctggtc accgtctcga gc 352

<210> 30
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 30

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 Ser Tyr
20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Ser Asp Ile Trp Lys Gln Gly Met Val Thr Val Tyr Asp Ser Val Lys
 50 55 60

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser
 115

<210> 31
 <211> 352
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 31
 gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttagc agctatgcc tgagctgggt ccgccaggct 120
 ccaggaagg ggctggagtg ggtctcatcg atttgaggt agggctctggc gacagcgagc 180
 ttacgcagac tccgtgaagg gccggtcac catctccaga gacaattcca agaacacgct 240
 gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300
 ttctgctggt ttgactact ggggccaggg aaccctggtc accgtctcga gc 352

<210> 32
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 32

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 Ser Tyr
 Page 20

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

20

25

30

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

Ser Ser Ile Trp Arg Gln Gly Leu Ala Thr Ala Tyr Asp Ser Val Lys
 50 55 60

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser
 115

<210> 33
 <211> 352
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 33
 gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtctcagag attgtggcta ctggtatttt gacaagtagc 180
 ttacgcagac tccgtgaagg gccgggtcac catctccaga gacaattcca agaacacgct 240
 gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300
 ttctgtggt ttgactact ggggccaggg aaccctggtc accgtctcga gc 352

<210> 34
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 34

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 Ser Tyr
 20 25 30

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

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

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser
 115

<210> 35
 <211> 352
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 35
 gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
 ccaggaagg ggctggagt ggtctcatcg attggtcggg agggtttgat tacagttagc 180
 ttacgcagac tccgtgaagg gccggtcac catctccaga gacaattcca agaacacgct 240
 gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300
 ttctgctggt ttgactact ggggccaggg aaccctgggc accgtctcga gc 352

<210> 36
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 36

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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 Ser Tyr
20 25 30

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

Ser Ser Ile Gly Arg Gln Gly Leu Ile Thr Val Tyr Asp Ser Val Lys
50 55 60

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 37
<211> 352
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 37
gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtctcatct atttggtatt agggctctgtg gacagttagc 180
ttacgcagac tccgtgaagg gccgggtcac catctccaga gacaattcca agaacacgct 240
gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300
ttctgctggt ttgactact ggggccaggg aaccctggtc accgtctcga gc 352

<210> 38
<211> 115
<212> PRT
<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 38

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Trp Tyr Gln Gly Leu Val Thr Val Tyr Asp Ser Val Lys
 50 55 60

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser
 115

<210> 39

<211> 352

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 39

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggaagg ggctggagtg ggtctcagat atttgaagt agggttttgc tacagcgagc 180

ttacgcagac tccgtgaagg gccggttcac catctccaga gacaattcca agaacacgct 240

gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300

ttctgctggt ttgtactact ggggccaggg aaccctggtc accgtctcga gc 352

<210> 40

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 40

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 Ser Tyr
 20 25 30

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

Ser Asp Ile Trp Lys Gln Gly Phe Ala Thr Ala Asp Ser Val Lys Gly
 50 55 60

Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
 65 70 75 80

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 85 90 95

Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
 100 105 110

Ser Ser

<210> 41

<211> 352

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 41

gaggtgcagc tgttgagtc tgggggaggc ttggtacagc ctgggggggc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcc a tgagctgggt ccgccaggct 120

ccaggggaagg ggctggagtg ggtctcaagt atttgaagt agggattgt gacagtgagc 180

ttacgcagac tccgtgaagg gccgggtcac catctccaga gacaattcca agaacacgct 240

gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300

ttctgctggt ttgtactact ggggccaggg aaccctgggc accgtctcga gc 352

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 42

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 42

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Trp Lys Gln Gly Ile Val Thr Val Tyr Asp Ser Val Lys
 50 55 60

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser
 115

<210> 43

<211> 352

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 43

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggggaagg ggctggagtg ggtctcatcg atttgaggt agggctctgc gacagcgagc 180

ttacgcagac tccgtgaagg gccggttcac catctccaga gacaattcca agaacacgct 240

gtatctgcaa atgaacagcc tgagagccga ggacacggcc gtatattact gtgcgaaatc 300

ttctgctggt ttgactact ggggccaggg aaccctgggc accgtctcga gc 352

<210> 44
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 44

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Trp Arg Gln Gly Leu Ala Thr Ala Tyr Asp Ser Val Lys
 50 55 60

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

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

Lys Ser Ser Ala Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser
 115

<210> 45
 <211> 348
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 45

gaggtgcagc tgttgagtc tgggggaggc ttggtacagc ctgggggggc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggggaagg ggctggagtg ggtctcaagt atttggcgga atggtattgt tacagtttac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaatggctt 300

gctgcttttg actactgggg ccaggaacc ctggtcaccg tctcgagc 348

<210> 46

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 46

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 Ser Tyr
20 25 30

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

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val 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
85 90 95

Ala Lys Trp Ser Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser
115

<210> 47

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 47

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggaagg ggctggagtg ggtctcaagt attggcgga atggattgt tacagttac 180

gcagactccg tgaagggccg gttcacatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaatggct 300

gctggttatg actactgggg ccaggaacc ctggtcaccg tctcgagc 348

<210> 48

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 48

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 Ser Tyr
20 25 30

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

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val 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
85 90 95

Ala Lys Trp Ser Ala Gly Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser
115

<210> 49

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 49

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

tctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtctcaagt atttggcggg atgggtattgt tacagtttac 180
 gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaataa acagcctgag agccgaggac acggccgtat attactgtgc gaaatgggtct 300
 aagggttttg actactgggg ccaggggaacc ctggtcaccg tctcgagc 348

<210> 50
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 50

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val 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
 85 90 95

Ala Lys Trp Ser Lys Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser
 115

<210> 51
 <211> 348
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<400> 51
gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtctcatct atttggtatc agggctctgt gacagtttac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataa acagcctgag agccgaggac acggccgtat attactgtgc gaaatgggtc 300
gctgcttttg actactgggg ccaggggaacc ctggtcaccg tctcgagc 348

<210> 52
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 52

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 Ser Tyr
20 25 30

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

Ser Ser Ile Trp Tyr Gln Gly Leu Val Thr Val 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
85 90 95

Ala Lys Trp Ser Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser
115

<210> 53
<211> 348
<212> DNA
<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 53

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggggaagg ggctggagtg ggtctcaagt atttggcggg atgggtattgt tacagtttac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatac acagcctgag agccgaggac acggccgtat attactgtgc gaaatgggtc 300

gctgggtatg actactgggg ccaggggaacc ctggtcaccg tctcgagc 348

<210> 54

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 54

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Trp Tyr Gln Gly Leu Val Thr Val 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
 85 90 95

Ala Lys Trp Ser Ala Gly Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser
 115

<210> 55

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 55

gaggtgcagc tgttgagtc tgggggaggc ttgtacagc ctgggggggc cctgagactc 60

tcctgtgcag cctctggatt caccttagc agctatgcca tgagctgggt ccgccaggct 120

ccaggaagg ggctggagt ggtctcaagt attggcgga atggattgt tacagttac 180

gcagactccg tgaagggccg gttcacatc tccagagaca attcaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggccgtat attactgtgc gaaatggtct 300

aagggtttg actactgggg ccaggaacc ctggtcaccg tctcgagc 348

<210> 56

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 56

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 Ser Tyr

20 25 30

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

35 40 45

Ser Ser Ile Trp Tyr Gln Gly Leu Val Thr Val 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

85 90 95

Ala Lys Trp Ser Lys Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val

100 105 110

Thr Val Ser Ser

115

<210> 57
 <211> 324
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 57
 gatattcaga tgaccagag cccgagcagc ctgagcgcga gcgtgggcga tcgctgacc 60
 attacctgcc gcgcgagcca gagcattagc agctatctga actggtatca gcagaaaccg 120
 ggcaaagcgc cgaaactgct gatttatgcg gcgagcagcc tgcagagcgg cgtgccgagc 180
 cgctttagcg gcagcggcag cggcaccgat ttaccctga ccattagcag cctgcagccg 240
 gaagattttg cgacctatta tgccagcag gataacggct atccgagcac ctttggcggc 300
 ggcaccaaag tggaaattaa acgc 324

<210> 58
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 58

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

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

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

Tyr Ala 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 Gln Gln Asp Asn Gly Tyr Pro Ser
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 59
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 59

Leu Cys Glu Val Leu Met Leu Leu Gln His Pro Trp Cys Met Gly
 1 5 10 15

<210> 60
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 60

Ile Ala Cys Arg His Phe Met Glu Gln Leu Pro Phe Cys His His
 1 5 10 15

<210> 61
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 61

Phe Gly Pro Arg Cys Gly Glu Ala Ser Thr Cys Val Pro Tyr Glu
 1 5 10 15

<210> 62
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 62

Ile Leu Tyr Cys Asp Ser Trp Gly Ala Gly Cys Leu Thr Arg Pro
 1 5 10 15

<210> 63
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 63

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr
 1 5 10 15

<210> 64

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 64

Asp Gly Pro Arg Cys Phe Val Ser Gly Glu Cys Ser Pro Ile Gly
 1 5 10 15

<210> 65

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 65

Leu Cys Tyr Lys Leu Asp Tyr Asp Asp Arg Ser Tyr Cys His Ile
 1 5 10 15

<210> 66

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 66

Pro Cys His Pro His Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val
 1 5 10 15

<210> 67

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 67

Pro Cys Tyr Trp His Pro Phe Phe Ala Tyr Arg Tyr Cys Asn Thr
 1 5 10 15

<210> 68

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 68

Val Cys Tyr Tyr Met Asp Trp Leu Gly Arg Asn Trp Cys Ser Ser
 1 5 10 15

<210> 69

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 69

Leu Cys Asp Leu Phe Lys Leu Arg Glu Phe Pro Tyr Cys Met Gly
 1 5 10 15

<210> 70

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 70

Tyr Leu Pro Cys His Phe Val Pro Ile Gly Ala Cys Asn Asn Lys
 1 5 10 15

<210> 71

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 71

Ile Phe Cys His Met Gly Val Val Val Pro Gln Cys Ala Asn Tyr
 1 5 10 15

<210> 72

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 72

Ala Cys His Pro His Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val
 1 5 10 15

<210> 73

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 73

Pro Cys His Pro Ala Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val
 1 5 10 15

<210> 74

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 74

Pro Cys His Pro His Ala Tyr Asp Ala Arg Pro Tyr Cys Asn Val
 1 5 10 15

<210> 75

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 75

Pro Cys His Pro His Pro Ala Asp Ala Arg Pro Tyr Cys Asn Val
 1 5 10 15

<210> 76

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 76

Pro Cys His Pro His Pro Tyr Ala Ala Arg Pro Tyr Cys Asn Val
1 5 10 15

<210> 77

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 77

Pro Cys His Pro His Pro Tyr Asp Ala Ala Pro Tyr Cys Asn Val
1 5 10 15

<210> 78

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 78

Pro Cys His Pro His Pro Tyr Asp Ala Arg Pro Ala Cys Asn Val
1 5 10 15

<210> 79

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 79

Pro Cys His Pro His Pro Tyr Asp Ala Arg Pro Tyr Cys Ala Val
1 5 10 15

<210> 80

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 80

Pro Cys His Ala His Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val
 1 5 10 15

<210> 81
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 81

Pro Cys His Pro His Pro Tyr Asp Ala Arg Ala Tyr Cys Asn Val
 1 5 10 15

<210> 82
 <211> 534
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 82
 caaggctcagt ctggatccta ttgcgagggt agtgagctgt ttgttctcc ttggtgcatg 60
 ggtggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120
 tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180
 tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240
 tacctgaact ggtatcagca gaagcccgcc aaggccccc aactgctgat ctacgccgcc 300
 agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360
 accctgacca tcagctccct gcagcccgag gacttcgcca cctactactg ccagcaggac 420
 aacggctacc ccagcacctt tggcggagggt accaaggtgg aaatcaagcg ttgtgaggcc 480
 actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 83
 <211> 157
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 83

Gln Gly Gln Ser Gly Ser Tyr Cys Glu Val Ser Glu Leu Phe Val Leu
 1 5 10 15

Pro Trp Cys Met Gly Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser

20

25

30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 84

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 84

caaggtcagt ctggatcctc ttgccttatg catccgcatt atgctcatga ttattgctat 60

gttggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggctgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 85
 <211> 157
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 85

Gln Gly Gln Ser Gly Ser Ser Cys Leu Met His Pro His Tyr Ala His
 1 5 10 15

Asp Tyr Cys Tyr Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 86
 <211> 534
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 86

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

caaggtcagt ctggatcctt gtgcgaggtt ttgatgtgt tgcagcatcc gtggtgcatg 60

gggggaggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca ggggctctgg caccgacttc 360

acctgacca tcagctcctt gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 87

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 87

Gln Gly Gln Ser Gly Ser Leu Cys Glu Val Leu Met Leu Leu Gln His
1 5 10 15

Pro Trp Cys Met Gly Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 88

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 88

caaggtcagt ctggatccat tgcgtgccg cattttatgg agcagttgcc gtttgccat 60

catggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgtagcgg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggagg accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 89

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 89

Gln Gly Gln Ser Gly Ser Ile Ala Cys Arg His Phe Met Glu Gln Leu
 1 5 10 15

Pro Phe Cys His His Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 90

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 90

caaggtcagt ctggatcctt tggctctagg tgcggtgagg ctctacttg cgttccgtat 60

gagggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggagggt accaagggtg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 91

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 91

Gln Gly Gln Ser Gly Ser Phe Gly Pro Arg Cys Gly Glu Ala Ser Thr
 1 5 10 15

Cys Val Pro Tyr Glu Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 92

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 92

caaggtcagt ctggatccat tctttattgc gatagttggg gggcgggggtg cttgacgcgg 60

ccgggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccgcc aaggccccc aactgctgat ctacgccgcc 300

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctccct gcagcccgag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 93

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 93

Gln Gly Gln Ser Gly Ser Ile Leu Tyr Cys Asp Ser Trp Gly Ala Gly
1 5 10 15

Cys Leu Thr Arg Pro Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 94

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 94

caaggtcagt ctggatccgg gattgcgttg tgcccgtctc attttgcca gctgcctcag 60

actggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 95

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 95

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys

1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser

20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly

35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val

50 55 60

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

65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu

85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser

100

105

110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 96

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 96

caaggtcagt ctggatccga tgggccgcgt tgctttgtgt cgggggagtg ctctccgatt 60

gggtggaggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccc aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 97

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 97

Gln Gly Gln Ser Gly Ser Asp Gly Pro Arg Cys Phe Val Ser Gly Glu
 1 5 10 15

Cys Ser Pro Ile Gly Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 98

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 98

caaggtcagt ctggatcctt gtgctataag ctggattatg atgataggtc ttattgccat 60

attggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

acctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 99

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 99

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

Ser Tyr Cys His Ile Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 100

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 100

caaggtcagt ctggatcccc gtgccatccg catccttatg atgctcgtcc ttattgcaat 60

gtgggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180
 tctgctagcg tggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240
 tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 300
 agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360
 accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420
 aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480
 actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 101

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 101

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Asp Ala Arg
 1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 102
 <211> 534
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 102
 caaggtcagt ctggatcccc ttgctattgg catcctttt ttgcgtatag gtattgcaat 60
 actggagggtg gctcgagcgg tggcagcggg ggctctgggt gtactagcac ctctggtcgt 120
 tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180
 tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240
 tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300
 agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360
 accctgacca tcagctcct gcagcccag gacttcgcca cctactactg ccagcaggac 420
 aacggctacc ccagcacctt tggcggagg accaagggtg aaatcaagcg ttgtgaggcc 480
 actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 103
 <211> 157
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 103

Gln Gly Gln Ser Gly Ser Pro Cys Tyr Trp His Pro Phe Phe Ala Tyr
 1 5 10 15

Arg Tyr Cys Asn Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 104
<211> 534
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 104
caaggtcagt ctggatccgt ttgctattat atggattggt tggggcggaa ttggtgctct 60
tcgggaggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120
tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180
tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240
tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300
agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360
accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420
aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480
actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 105
<211> 157
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 105

Gln Gly Gln Ser Gly Ser Val Cys Tyr Tyr Met Asp Trp Leu Gly Arg
Page 54

1 5 10 15
 Asn Trp Cys Ser Ser Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30
 Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45
 Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60
 Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80
 Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95
 Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125
 Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140
 Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 106
 <211> 534
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 106
 caaggtcagt ctggatccct gtgcgatctg ttaagtgc gtgagttcc ttattgcatg 60
 gggggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120
 tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180
 tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240
 tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 300
 agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360
 accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 107

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 107

Gln Gly Gln Ser Gly Ser Leu Cys Asp Leu Phe Lys Leu Arg Glu Phe
1 5 10 15

Pro Tyr Cys Met Gly Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 108

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 108

caaggtcagt ctggatccta tctccgtgc cattttgttc cgattggggc ttgcaataat 60

aagggaggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 109

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 109

Gln Gly Gln Ser Gly Ser Tyr Leu Pro Cys His Phe Val Pro Ile Gly
 1 5 10 15

Ala Cys Asn Asn Lys Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 110

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 110

caaggtcagt ctggatccat ttttgccat atgggtgttg tggttcctca gtgcgcgaat 60

tatggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 111

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 111

Gln Gly Gln Ser Gly Ser Ile Phe Cys His Met Gly Val Val Val Pro
 1 5 10 15

Gln Cys Ala Asn Tyr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 112

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 112

caaggtcagt ctggatccgc gtgccatccg catccttatg atgctcgtcc ttattgcaat 60

gtgggaggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccgcc aaggccccc aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctccct gcagcccgag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 113

<211> 157

<212> PRT

<213> Artificial Sequence

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<220>

<223> chemically synthesized

<400> 113

Gln Gly Gln Ser Gly Ser Ala Cys His Pro His Pro Tyr Asp Ala Arg
1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 114

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 114

caaggtcagt ctggatcccc gtgccatccg gctccttatg atgctcgtcc ttattgcaat 60

gtgggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggctgt 120

tccgctaacc caggtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttgg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 115

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 115

Gln Gly Gln Ser Gly Ser Pro Cys His Pro Ala Pro Tyr Asp Ala Arg
1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 116
 <211> 534
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 116
 caaggtcagt ctggatcccc gtgccatccg catgcttatg atgctcgtcc ttattgcaat 60
 gtgggagggtg gctcgagcgg tggcagcggg ggctctgggtg gtactagcac ctctggtcgt 120
 tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180
 tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240
 tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300
 agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360
 accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420
 aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480
 actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 117
 <211> 157
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 117

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Ala Tyr Asp Ala Arg
 1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu

85

90

95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 118

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 118

caaggtcagt ctggatcccc gtgccatccg catcctgctg atgctcgtcc ttattgcaat 60

gtgggaggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 119

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 119

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Ala Asp Ala Arg
 1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 120

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 120

caaggtcagt ctggatcccc gtgccatccg catccttatg ctgctcgtcc ttattgcaat 60

gtgggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggctgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggagg accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 121

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 121

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Ala Ala Arg
1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 122

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<400> 122

caaggtcagt ctggatcccc gtgcatccg catccttatg atgctgctcc ttattgcaat 60

gtgggaggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggagcag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagccggc aaggcccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctcct gcagcccgag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 123

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 123

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Asp Ala Ala
 1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 124
 <211> 534
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 124
 caaggtcagt ctggatcccc gtgccatccg catccttatg atgctcgtcc tgcttgcaat 60
 gtgggagggtg gctcgagcgg tggcagcggg ggctctgggtg gtactagcac ctctggtcgt 120
 tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180
 tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240
 tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300
 agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttgg caccgacttc 360
 accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420
 aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480
 actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 125
 <211> 157
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 125

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Asp Ala Arg
 1 5 10 15

Pro Ala Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 126
<211> 534
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 126
caaggtcagt ctggatcccc gtgccatccg catccttatg atgctcgtcc ttattgcgct 60

gtgggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360

acctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggagggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 127
<211> 157
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 127

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Asp Ala Arg
 1 5 10 15

Pro Tyr Cys Ala Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 128

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 128

caaggtcagt ctggatcccc gtgccatgcg catccttatg atgctcgctc ttattgcaat 60

gtgggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggctgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 300

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 360

accctgacca tcagctccct gcagcccgag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 129

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 129

Gln Gly Gln Ser Gly Ser Pro Cys His Ala His Pro Tyr Asp Ala Arg
1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 130

<211> 534

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 130

caaggtcagt ctggatcccc gtgcatccg catcctatg atgctcgtgc ttattgcaat 60

gtgggagggtg gctcgagcgg tggcagcggg ggctctggtg gtactagcac ctctggtcgt 120

tccgctaacc cacgtggcgg cggttctgac atccagatga cccagagccc cagcagcctg 180

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 240

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 300

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 360

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 420

aacggctacc ccagcacctt tggcggagggt accaaggtgg aaatcaagcg ttgtgaggcc 480

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 534

<210> 131

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 131

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Asp Ala Arg
1 5 10 15Ala Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
35 40 45Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
50 55 60Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
65 70 75 80Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 132

<211> 492

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 132

caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtggctc tgggtgtatt 60

agcagtggtc tgtaagcgg tcgtagcgat aatcatggcg gttctgacat ccagatgacc 120

cagagcccca gcagcctgtc tgctagcgtg ggcgacagag tgaccatcac ctgtagagcc 180

agccagagca tcagcagcta cctgaactgg tatcagcaga agcccggcaa ggccccaaa 240

ctgctgatct acgccgccag ctctctgcag tctggcgtgc ccagcagatt ttccggcagc 300

ggctctggca ccgacttcac cctgaccatc agtcacctgc agcccgagga ctcgccacc 360

tactactgcc agcaggacaa cggctacccc agcaccttg gcggaggtag caaggtggaa 420

atcaagcgtt gtgaggccac tcacaagaca tcaacttcac ccattgtcaa gagctcaac 480

aggaatgagt gt 492

<210> 133

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 133

Gln Gly Gln Ser Gly Ser Leu Cys Glu Val Leu Met Leu Leu Gln His
 1 5 10 15

Pro Trp Cys Met Gly Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 134

<211> 492

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 134

caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtggctc tgggtgtatt 60

agcagtggtc tgtaagcgg tcgtagcgat aatcatggcg gttctgacat ccagatgacc 120

cagagcccca gcagcctgtc tgctagcgtg ggcgacagag tgaccatcac ctgtagagcc 180

agccagagca tcagcagcta cctgaactgg tatcagcaga agcccggcaa ggccccaaa 240

ctgctgatct acgccgccag ctctctgcag tctggcgtgc ccagcagatt ttccggcagc 300

ggctctggca ccgacttcac cctgaccatc agctccctgc agcccgagga cttcgccacc 360

tactactgcc agcaggacaa cggtacccc agcacctttg gcggaggtac caaggtggaa 420

atcaagcgtt gtgaggccac tcacaagaca tcaacttcac ccattgtcaa gagcttcaac 480

aggaatgagt gt 492

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 135

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 135

Gln Gly Gln Ser Gly Ser Ile Leu Tyr Cys Asp Ser Trp Gly Ala Gly
 1 5 10 15

Cys Leu Thr Arg Pro Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 136

<211> 492

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 136

caaggtcagt ctggatccgg aggtggctcg agcggtaggca gcggtggctc tggtaggtatt 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

agcagtgggc tgtaagcgg tcgtagcgat aatcatggcg gttctgacat ccagatgacc 120
 cagagcccca gcagcctgtc tgctagcgtg ggcgacagag tgaccatcac ctgtagagcc 180
 agccagagca tcagcagcta cctgaactgg tatcagcaga agcccggcaa ggccccaaa 240
 ctgctgatct acgccgccag ctctctgcag tctggcgtgc ccagcagatt ttccggcagc 300
 ggctctggca ccgacttcac cctgaccatc agctccctgc agcccgagga cttcgccacc 360
 tactactgcc agcaggacaa cggctacccc agcaccttg gcggaggtag caaggtggaa 420
 atcaagcgtt gtgaggccac tcacaagaca tcaacttcac ccattgtcaa gagcttcaac 480
 aggaatgagt gt 492

<210> 137

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 137

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 138
<211> 492
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 138
caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtggctc tgggtgtatt 60
agcagtggtc tgttaagcgg tcgtagcgat aatcatggcg gttctgacat ccagatgacc 120
cagagcccca gcagcctgtc tgctagcgtg ggcgacagag tgaccatcac ctgtagagcc 180
agccagagca tcagcagcta cctgaactgg tatcagcaga agcccggcaa ggccccaaa 240
ctgctgatct acgccgccag ctctctgcag tctggcgtgc ccagcagatt ttccggcagc 300
ggctctggca ccgacttcac cctgaccatc agctccctgc agcccgagga cttcgccacc 360
tactactgcc agcaggacaa cggtacccc agcacctttg gcggaggtag caaggtggaa 420
atcaagcgtt gtgaggccac tcacaagaca tcaacttcac ccattgtcaa gagcttcaac 480
aggaatgagt gt 492

<210> 139
<211> 158
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 139

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Asp Ala Arg
1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
Page 76

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gln Gly Gln Ser Gly Ser Tyr Leu Pro Cys His Phe Val Pro Ile Gly
 1 5 10 15

Ala Cys Asn Asn Lys Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 142

<211> 492

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 142

caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtggctc tgggtgtatt 60

agcagtggtc tgtaagcgg tcgtagcgat aatcatggcg gttctgacat ccagatgacc 120

cagagcccca gcagcctgtc tgctagcgtg ggcgacagag tgaccatcac ctgtagagcc 180

agccagagca tcagcagcta cctgaactgg tatcagcaga agcccggcaa ggcccccaaa 240

ctgctgatct acgccgccag ctctctgcag tctggcgtgc ccagcagatt ttccggcagc 300

ggctctggca ccgacttcac cctgaccatc agtcacctgc agcccagga ctcgccacc 360

tactactgcc agcaggacaa cggctacccc agcacctttg gcggaggtag caaggtggaa 420

atcaagcgtt gtagggccac tcacaagaca tcaacttcac ccattgtcaa gagcttcaac 480

aggaatgagt gt 492

<210> 143

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 143

Gln Gly Gln Ser Gly Ser Ile Phe Cys His Met Gly Val Val Val Pro
1 5 10 15

Gln Cys Ala Asn Tyr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 144

<211> 492

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 144

caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtggctc tgggtgtatt 60

agcagtggtc tgtaagcgg tcgtagcgat aatcatggcg gttctgacat ccagatgacc 120

cagagcccca gcagcctgtc tgctagcgtg ggcgacagag tgaccatcac ctgtagagcc 180

agccagagca tcagcagcta cctgaactgg tatcagcaga agcccggcaa ggccccaaa 240

ctgctgatct acgccgccag ctctctgcag tctggcgtgc ccagcagatt ttccggcagc 300

ggctctggca ccgacttcac cctgaccatc agctccctgc agcccgagga cttcgccacc 360

tactactgcc agcaggacaa cggctacccc agcacctttg gcggaggtac caaggtggaa 420

atcaagcgtt gtgaggccac tcacaagaca tcaacttcac ccattgtcaa gagcttcaac 480

aggaatgagt gt 492

<210> 145

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 145

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Ala Tyr Asp Ala Arg
 1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 146
 <211> 495
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 146
 caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtgctgt gggctcctg 60
 gtcctcccg ggcgctgtc cggccgcagc gataatcatg gcggttctga catccagatg 120
 acccagagcc ccagcagcct gtctgctagc gtgggcgaca gagtgacat cacctgtaga 180
 gccagccaga gcatcagcag ctacctgaac tggatcagc agaagcccgg caaggccccc 240
 aaactgctga tctacgccgc cagctctctg cagtctggcg tgcccagcag atttccggc 300
 agcggctctg gcaccgactt caccctgacc atcagctccc tgcagcccga ggacttcgcc 360
 acctactact gccagcagga caacggctac cccagcacct ttggcggagg taccaaggtg 420
 gaaatcaagc gttgtgaggc cactcacaag acatcaactt caccattgt caagagcttc 480
 aacaggaatg agtgt 495

<210> 147
 <211> 159
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 147

Gln Gly Gln Ser Gly Ser Leu Cys Glu Val Leu Met Leu Leu Gln His
 1 5 10 15

Pro Trp Cys Met Gly Gly Gly Gly Ser Ser Gly Gly Ser Gly Ala Val
 20 25 30

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn His
 35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
 50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
 65 70 75 80

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
 85 90 95

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
 115 120 125

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly
 130 135 140

Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 148

<211> 495

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 148

caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtgctgt gggctcctg 60

gctcccccg gcggcctgtc cggccgcagc gataatcatg gcggttctga catccagatg 120

accagagacc ccagcagcct gtctgctagc gtgggcgaca gagtgacat cacctgtaga 180

gccagccaga gcatcagcag ctacctgaac tggatcagc agaagcccgg caaggccccc 240

aaactgctga tctacgccgc cagctctctg cagtctggcg tgccagcag atttccggc 300

agcggctctg gcaccgactt caccctgacc atcagctccc tgacgcccga ggacttcgcc 360

acctactact gccagcagga caacggctac cccagcacct ttggcggagg taccaagggtg 420

gaaatcaagc gttgcaagt caccatcag ggctgagct cgcccgtcac aaagagcttc 480

aacaggggag agtgt 495

<210> 149

<211> 159

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 149

Gln Gly Gln Ser Gly Ser Ile Leu Tyr Cys Asp Ser Trp Gly Ala Gly
 1 5 10 15

Cys Leu Thr Arg Pro Gly Gly Gly Ser Ser Gly Gly Ser Gly Ala Val
 20 25 30

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn His
 35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
 50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
 65 70 75 80

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
 85 90 95

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
 115 120 125

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly
 130 135 140

Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 150

<211> 495

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 150

caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtgctgt gggctcctg 60

gctcccccg gcggcctgtc cggccgcagc gataatcatg gcggttctga catccagatg 120

accagagcc ccagcagcct gtctgctagc gtgggcgaca gagtgaccat cacctgtaga 180

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

gccagccaga gcatcagcag ctacctgaac tggatcagc agaagcccgg caaggccccc 240
 aaactgtga tctacgccgc cagctctctg cagtctggcg tgcccagcag atttccggc 300
 agcggctctg gcaccgactt caccctgacc atcagctccc tgcagcccga ggacttcgcc 360
 acctactact gccagcagga caacggctac cccagcacct ttggcggagg taccaagggtg 420
 gaaatcaagc gttgcgaagt caccatcag ggctgagct cgcccgtcac aaagagcttc 480
 aacaggggag agtgt 495

<210> 151
 <211> 159
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 151

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Ala Val
 20 25 30

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn His
 35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
 50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
 65 70 75 80

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
 85 90 95

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
 115 120 125

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly
 130 135 140

Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 Page 84

145

150

155

<210> 152
<211> 495
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 152
caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtgctgt gggctcctg 60
gctcccccg gcggcctgtc cggccgcagc gataatcatg gcggttctga catccagatg 120
accagagacc ccagcagcct gtctgttagc gtgggcgaca gagtgacat cacctgtaga 180
gccagccaga gcatcagcag ctacctgaac tggatcagc agaagcccgg caaggcccc 240
aaactgtga tctacgccgc cagctctctg cagtctggcg tgcccagcag atttccggc 300
agcggctctg gcaccgactt caccctgacc atcagctccc tgcagcccga ggacttcgcc 360
acctactact gccagcagga caacggctac cccagcacct ttggcggagg taccaagggtg 420
gaaatcaagc gttgcgaagt caccatcag ggcctgagct cgcccgtcac aaagagcttc 480
aacaggggag agtgt 495

<210> 153
<211> 159
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 153

Gln Gly Gln Ser Gly Ser Tyr Leu Pro Cys His Phe Val Pro Ile Gly
1 5 10 15

Ala Cys Asn Asn Lys Gly Gly Gly Ser Ser Gly Gly Ser Gly Ala Val
20 25 30

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn His
35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
65 70 75 80

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gln Cys Ala Asn Tyr Gly Gly Gly Ser Ser Gly Gly Ser Gly Ala Val
20 25 30

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn His
35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
65 70 75 80

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
85 90 95

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
115 120 125

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly
130 135 140

Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 156

<211> 495

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 156

caaggtcagt ctggatccgg aggtggctcg agcgggtggca gcggtgctgt gggctctctg 60

gtccccccgg gcggcctgtc cggccgcagc gataatcatg gcggttctga catccagatg 120

accagagacc ccagcagcct gtctgctagc gtgggcgaca gagtgacat cacctgtaga 180

gccagccaga gcatcagcag ctacctgaac tggatcagc agaagcccgg caaggccccc 240

aaactgtga tctacgccgc cagctctctg cagtctggcg tgcccagcag atttccggc 300

agcgggtctg gcaccgactt caccctgacc atcagctccc tcagcccga ggacttcgcc 360

acctactact gccagcagga caacggctac cccagcacct ttggcggagg taccaaggtg 420

gaaatcaagc gttgtgaggc cactcacaag acatcaactt cacccattgt caagagcttc 480

aacaggaatg agtgt

495

<210> 157

<211> 159

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 157

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Ala Tyr Asp Ala Arg
 1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Ala Val
 20 25 30

Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Asp Asn His
 35 40 45

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala
 50 55 60

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
 65 70 75 80

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
 85 90 95

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
 115 120 125

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly
 130 135 140

Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 158

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 158

Ser Tyr Ala Met Ser
1 5

<210> 159

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 159

Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr
1 5 10

<210> 160

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 160

Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala Tyr
1 5 10

<210> 161

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(1)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (3)..(5)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (7)..(8)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (10)..(10)

<223> Xaa can be any naturally occurring amino acid

<400> 161

Xaa Ile Xaa Xaa Xaa Gly Xaa Xaa Thr Xaa Tyr
 1 5 10

<210> 162

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 162

Ser Ser Ala Gly Phe Asp Tyr
 1 5

<210> 163

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(2)

<223> Xaa can be any naturally occurring amino acid

<400> 163

Xaa Xaa Ala Gly Phe Asp Tyr
 1 5

<210> 164

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (2)..(3)

<223> Xaa can be any naturally occurring amino acid

<400> 164

Ser Xaa Xaa Gly Phe Asp Tyr
 1 5

<210> 165
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (3)..(4)
 <223> Xaa can be any naturally occurring amino acid

<400> 165

Ser Ser Xaa Xaa Phe Asp Tyr
 1 5

<210> 166
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa can be any naturally occurring amino acid

<400> 166

Xaa Ser Xaa Gly Phe Asp Tyr
 1 5

<210> 167
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (4)..(4)
<223> Xaa can be any naturally occurring amino acid

<400> 167

Xaa Ser Ala Xaa Phe Asp Tyr
1 5

<210> 168
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<220>
<221> misc_feature
<222> (2)..(2)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (4)..(4)
<223> Xaa can be any naturally occurring amino acid

<400> 168

Ser Xaa Ala Xaa Phe Asp Tyr
1 5

<210> 169
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<220>
<221> misc_feature
<222> (1)..(1)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (5)..(5)
<223> Xaa can be any naturally occurring amino acid

<400> 169

Xaa Ser Ala Gly Xaa Asp Tyr
1 5

<210> 170

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (2)..(2)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (5)..(5)

<223> Xaa can be any naturally occurring amino acid

<400> 170

Ser Xaa Ala Gly Xaa Asp Tyr

1 5

<210> 171

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (3)..(3)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (5)..(5)

<223> Xaa can be any naturally occurring amino acid

<400> 171

Ser Ser Xaa Gly Xaa Asp Tyr

1 5

<210> 172

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (4)..(5)

<223> Xaa can be any naturally occurring amino acid

<400> 172

Ser Ser Ala Xaa Xaa Asp Tyr
 1 5

<210> 173

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (2)..(5)

<223> Xaa at positions 2-5 can be any naturally occurring amino acid
and up to three of them may be absent

<400> 173

Thr Xaa Xaa Xaa Xaa Phe
 1 5

<210> 174

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 174

Gln Ser Ile Ser Ser Tyr
 1 5

<210> 175

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 175

Ala Ala Ser Ser
 1

<210> 176

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 176

Tyr Ala Ser Thr

1

<210> 177

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 177

Cys Gln Gln Ser Tyr Ser Thr Pro Pro

1

5

<210> 178

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 178

Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr

1

5

10

<210> 179

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(1)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (4)..(4)

<223> Xaa can be any naturally occurring amino acid

<400> 179

Xaa Ala Ser Xaa

1

<210> 180
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(2)
 <223> Xaa can be any naturally occurring amino acid

<400> 180

Xaa Xaa Gly Tyr Pro Ser Thr
 1 5

<210> 181
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (2)..(3)
 <223> Xaa can be any naturally occurring amino acid

<400> 181

Asp Xaa Xaa Tyr Pro Ser Thr
 1 5

<210> 182
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (3)..(4)
 <223> Xaa can be any naturally occurring amino acid

<400> 182

Asp Asn Xaa Xaa Pro Ser Thr
 1 5

<210> 183
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa can be any naturally occurring amino acid

<400> 183

Asp Asn Gly Xaa Pro Xaa Thr
 1 5

<210> 184
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (6)..(7)
 <223> Xaa can be any naturally occurring amino acid

<400> 184

Asp Asn Gly Tyr Pro Xaa Xaa
 1 5

<210> 185
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa can be any naturally occurring amino acid

<400> 185

Xaa Asn Xaa Tyr Pro Ser Thr
 1 5

<210> 186
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> Xaa can be any naturally occurring amino acid

<400> 186

Xaa Asn Gly Xaa Pro Ser Thr
 1 5

<210> 187
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa can be any naturally occurring amino acid

<400> 187

Xaa Asn Gly Tyr Pro Xaa Thr
 1 5

<210> 188

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (2)..(2)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (4)..(4)

<223> Xaa can be any naturally occurring amino acid

<400> 188

Asp Xaa Gly Xaa Pro Ser Thr

1 5

<210> 189

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (2)..(2)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa can be any naturally occurring amino acid

<400> 189

Asp Xaa Gly Tyr Pro Xaa Thr

1 5

<210> 190

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (3)..(3)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa can be any naturally occurring amino acid

<400> 190

Asp Asn Xaa Tyr Pro Xaa Thr
 1 5

<210> 191
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 191

Gly Ser Gly Gly Ser
 1 5

<210> 192
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 192

Gly Gly Gly Ser
 1

<210> 193
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 193

Gly Gly Ser Gly
 1

<210> 194
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 194

Gly Gly Ser Gly Gly

1 5

<210> 195

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 195

Gly Ser Gly Ser Gly

1 5

<210> 196

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 196

Gly Ser Gly Gly Gly

1 5

<210> 197

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 197

Gly Gly Gly Ser Gly

1 5

<210> 198

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 198

Gly Ser Ser Ser Gly
1 5

<210> 199
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 199

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

<210> 200
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 200

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

<210> 201
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 201

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

<210> 202
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 202

Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Gly Ser
1 5 10 15

<210> 203

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

<220>
 <223> chemically synthesized

<400> 203

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

<210> 204
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 204

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

<210> 205
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 205

Gly Gly Gly Ser
 1

<210> 206
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 206

Gly Ser Ser Gly Thr
 1 5

<210> 207
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 207

Gly Ser Ser Gly

1

<210> 208

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 208

Tyr Cys Glu Val Ser Glu Leu Phe Val Leu Pro Trp Cys Met Gly

1

5

10

15

<210> 209

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 209

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn

1

5

10

<210> 210

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 210

Lys Ala Ser Arg Leu Gln Ser

1

5

<210> 211

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 211

Arg Ala Leu Lys Pro Val Thr

1 5

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

<220>
 <223> chemically synthesized

<400> 212

Ser Tyr Ala Met Ser
 1 5

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

<220>
 <223> chemically synthesized

<400> 213

Asp Ile Thr Ala Ser Gly Gln Arg Thr Thr Tyr Ala Asp Ser
 1 5 10

<210> 214
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 214

Ser Lys Ala Ile Phe Asp Tyr
 1 5

<210> 215
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 215

Ala Ala Ser Ser Leu Gln Ser
 1 5

<210> 216
 <211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 216

Ser Tyr Ser Thr Pro Asn Thr

1 5

<210> 217

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 217

Ser Ile Asn Lys Asp Gly His Tyr Thr Ser Tyr Ala Asp Ser

1 5 10

<210> 218

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 218

Asn Leu Asp Glu Phe Asp Tyr

1 5

<210> 219

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 219

Ser Ala Ser Gln Leu Gln Ser

1 5

<210> 220

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 220

Ala Asn Ser Arg Pro Ser Thr
1 5

<210> 221

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 221

Ser Ile Met Ala Thr Gly Ala Gly Thr Leu Tyr Ala Asp Ser
1 5 10

<210> 222

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 222

Asp Gly Ala Gly Phe Asp Tyr
1 5

<210> 223

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 223

Asn Ala Ser Ser Leu Gln Ser
1 5

<210> 224

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 224

Tyr Pro Tyr Gly Pro Gly
1 5

<210> 225
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 225

Thr Ile Thr Ser Ser Gly Ala Ala Thr Tyr Tyr Ala Asp Ser
 1 5 10

<210> 226
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 226

Asn Tyr Thr Gly Phe Asp Tyr
 1 5

<210> 227
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 227

Tyr Ala Ser Thr Leu Gln Ser
 1 5

<210> 228
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 228

Asp Asn Gly Tyr Pro Ser Thr
 1 5

<210> 229
 <211> 14
 <212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 229

Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala Tyr Ala Asp Ser
1 5 10

<210> 230

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 230

Ser Ser Ala Gly Phe Asp Tyr
1 5

<210> 231

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 231

Ser Ser Ile Tyr Ser Thr Gly Gly Ala Thr Ala Tyr Ala Asp Ser
1 5 10 15

<210> 232

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 232

Ser Ser Ala Gly Gln Ser Arg Pro Gly Phe Asp Tyr
1 5 10

<210> 233

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 233

Ser Ser Ala Gly Gln Ser Trp Pro Gly Phe Asp Tyr
1 5 10

<210> 234

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 234

Ser Ser Ala Gly Gln Ser Phe Pro Gly Phe Asp Tyr
1 5 10

<210> 235

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 235

Trp Ser Ala Ala Phe Asp Tyr
1 5

<210> 236

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 236

Trp Ser Ala Gly Tyr Asp Tyr
1 5

<210> 237

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 237

Trp Ser Lys Gly Phe Asp Tyr
1 5

<210> 238
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 238

Ser Ser Ile Trp Lys Gln Gly Ile Val Thr Val Tyr Asp Ser
 1 5 10

<210> 239
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 239

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val Tyr Asp Ser
 1 5 10

<210> 240
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 240

Ser Asp Ile Trp Lys Gln Gly Met Val Thr Val Tyr Asp Ser
 1 5 10

<210> 241
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 241

Ser Ser Ile Trp Arg Gln Gly Leu Ala Thr Ala Tyr Asp Ser
 1 5 10

<210> 242
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 242

Ser Glu Ile Val Ala Thr Gly Ile Leu Thr Ser Tyr Asp Ser
1 5 10

<210> 243

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 243

Ser Ser Ile Gly Arg Gln Gly Leu Ile Thr Val Tyr Asp Ser
1 5 10

<210> 244

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 244

Ser Ser Ile Trp Tyr Gln Gly Leu Val Thr Val Tyr Asp Ser
1 5 10

<210> 245

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 245

Ser Asp Ile Trp Lys Gln Gly Phe Ala Thr Ala Asp Ser
1 5 10

<210> 246

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 246

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val Tyr Ala Asp Ser
 1 5 10 15

<210> 247

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 247

Ser Ser Ile Trp Tyr Gln Gly Leu Val Thr Val Tyr Ala Asp Ser
 1 5 10 15

<210> 248

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 248

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

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

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

Gly Trp Ile Thr Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Val Tyr
 65 70 75 80

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

Ala Arg Asp Tyr Phe Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr
 100 105 110

Val Thr Val Ser Ser
 115

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 249

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 249

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 Thr Ser Gly Asp Thr Phe Ser Thr Tyr
20 25 30

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

Gly Gly Ile Ile Pro Ile Phe Gly Lys Ala His 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 Phe Cys
85 90 95

Ala Arg Lys Phe His Phe Val Ser Gly Ser Pro Phe Gly Met Asp Val
100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 250

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 250

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

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

Asp Val His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
Page 114

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

35 40 45

Gly Trp Leu His Ala Asp Thr Gly Ile Thr Lys Phe Ser Gln Lys Phe
50 55 60

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

<210> 251

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 251

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 Val Ser Gly Gly Ile Phe Ser Thr Tyr
20 25 30

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

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn His 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 Asp Gln Gly Ile Ala Ala Ala Leu Phe Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 252

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 252

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

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

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

Ser Gly Asn Ser Gly Asn Ile Gly Tyr Ala Asp Ser Val Lys Gly Arg
50 55 60

Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln Met
65 70 75 80

Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Val Pro
85 90 95

Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 253

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 253

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 Thr Ser Gly Asp 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 Gly Ile Ile Pro Ile Phe Gly Arg Ala His Tyr Ala Gln Lys Phe
Page 116

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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 Phe Cys
 85 90 95

Ala Arg Lys Phe His Phe Val Ser Gly Ser Pro Phe Gly Met Asp Val
 100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 254

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 254

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 Thr 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 Gly Ile Ile Pro Ile Phe Gly Lys Ala His Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Thr 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 Lys Tyr Asp Tyr Val Ser Gly Ser Pro Phe Gly Met Asp Val
 100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 255

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 255

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

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

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

Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 256

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 256

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

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

35 40 45

Gly Gly Ile Ile Pro Leu Phe Gly Ile Ala His Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

Ala Arg Lys Tyr Ser Tyr Val Ser Gly Ser Pro Phe Gly Met Asp Val
100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 257

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 257

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Phe Asp Asp Tyr
20 25 30

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

Ser Gly Ile Ser Trp Asn Arg Gly Arg Ile Glu Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Lys Gly Arg Phe Arg Tyr Phe Asp Trp Phe Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 258
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 258

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 Ser Ser Tyr
 20 25 30

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

Tyr Asp 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 Gln Gln Arg Ser Asn Trp Pro Arg
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 259
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 259

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 Ser Ser Tyr
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 Page 120

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

35 40 45

Tyr Asp 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 Gln Gln Arg Ser Asn Trp Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 260

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 260

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

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

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

Tyr Ala 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 Gln Gln Tyr Asn Ser Tyr Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 261

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 261

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15

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

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

Ile Tyr Gly 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 Arg Leu Glu
 65 70 75 80

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

Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 262

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 262

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15

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

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

Ile Tyr Gly 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 Arg Leu Glu
 Page 122

65

70

75

80

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

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 263

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 263

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 Ser Ser Tyr
 20 25 30

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

Tyr Asp 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 Gln Gln Arg Ser Asn Trp Pro Thr
 85 90 95

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 264

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 264

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

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

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

Tyr Asp Ala Ser Ser Leu Glu 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 Gln Gln Phe Asn Ser Tyr Pro Phe
 85 90 95

Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
 100 105

<210> 265

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 265

Glu Val Gln Leu Val 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 Arg Tyr
 20 25 30

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

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
 50 55 60

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

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

Ala Arg Glu Gly Gly Trp Phe Gly Glu Leu Ala Phe Asp Tyr Trp Gly
 Page 124

100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 266
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 266

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

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

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

Ile Tyr Asp 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 Arg Leu Glu
65 70 75 80

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

Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 267
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 267

Glu Val Gln Leu Val 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 Asp Ser
20 25 30

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

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

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

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

Ala Arg Arg His Trp Pro Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ala
 115

<210> 268

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 268

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Leu Tyr His Pro Ala
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg

100

105

<210> 269

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 269

Asp Tyr Phe Tyr Gly Met Asp Val

1 5

<210> 270

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 270

Lys Phe His Phe Val Ser Gly Ser Pro Phe Gly Met Asp Val

1 5 10

<210> 271

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 271

Glu Arg Ile Gln Leu Trp Phe Asp Tyr

1 5

<210> 272

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 272

Asp Gln Gly Ile Ala Ala Ala Leu Phe Asp Tyr

1 5 10

<210> 273

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 273

Pro Phe Asp Tyr

1

<210> 274

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 274

Lys Tyr Asp Tyr Val Ser Gly Ser Pro Phe Gly Met Asp Val

1

5

10

<210> 275

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 275

Asp Ser Ser Gly Trp Ser Arg Tyr Tyr Met Asp Val

1

5

10

<210> 276

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 276

Lys Tyr Ser Tyr Val Ser Gly Ser Pro Phe Gly Met Asp Val

1

5

10

<210> 277

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 277

Gly Arg Phe Arg Tyr Phe Asp Trp Phe Leu Asp Tyr
1 5 10

<210> 278

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 278

Gln Gln Arg Ser Asn Trp Pro Arg Thr
1 5

<210> 279

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 279

Gln Gln Arg Ser Asn Trp Pro Thr
1 5

<210> 280

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 280

Gln Gln Tyr Asn Ser Tyr Pro Tyr Thr
1 5

<210> 281

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 281

Gln Gln Tyr Gly Ser Ser Pro Trp Thr
1 5

<210> 282

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 282

Gln Gln Tyr Gly Ser Ser Pro
 1 5

<210> 283

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 283

Gln Gln Phe Asn Ser Tyr Pro Phe Thr
 1 5

<210> 284

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 284

Trp Ile Thr Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu Gln
 1 5 10 15

Gly

<210> 285

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 285

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

Gly

<210> 286

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 286

Trp Leu His Ala Asp Thr Gly Ile Thr Lys Phe Ser Gln Lys Phe Gln
 1 5 10 15

Gly

<210> 287

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 287

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

Gly

<210> 288

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 288

Gly Ile Ser Gly Asn Ser Gly Asn Ile Gly Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

<210> 289

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 289

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

Gly

<210> 290

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 290

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

Asp

<210> 291

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 291

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

Gly

<210> 292

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 292

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Ile Ser Trp Asn Arg Gly Arg Ile Glu Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

<210> 293
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 293

Asp Ala Ser Asn Arg Ala Thr
 1 5

<210> 294
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 294

Gly Ala Ser Ser Arg Ala Thr
 1 5

<210> 295
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 295

Asp Ala Ser Ser Leu Glu Ser
 1 5

<210> 296
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 296

Asp Tyr Gly Phe Ser
1 5

<210> 297
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 297

Thr Tyr Ala Ile Ser
1 5

<210> 298
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 298

Ser Tyr Asp Val His
1 5

<210> 299
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 299

Thr Tyr Ala Ile Asn
1 5

<210> 300
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 300

Asp Tyr Val Val His
1 5

<210> 301

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 301

Ser Tyr Ala Ile Ser

1 5

<210> 302

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 302

Ser Tyr Ala Ile Asn

1 5

<210> 303

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 303

Asp Tyr Gly Met His

1 5

<210> 304

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 304

Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Val

1 5 10

<210> 305

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 305

Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Ala
1 5 10

<210> 306

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 306

Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala
1 5 10

<210> 307

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 307

Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala
1 5 10

<210> 308

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 308

Arg Ala Ser Gln Gly Ile Ser Ser Ala Leu Ala
1 5 10

<210> 309

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 309

Thr Tyr Ser Met Asn

1 5

<210> 310
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 310

Ser Ile Ser Ser Ser Gly Asp Tyr Ile Tyr Tyr Ala Asp Ser Val Lys
 1 5 10 15

<210> 311
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 311

Asp Leu Val Thr Ser Met Val Ala Phe Asp Tyr
 1 5 10

<210> 312
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 312

Ser Gly Asp Ala Leu Pro Gln Lys Tyr Val Phe
 1 5 10

<210> 313
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 313

Glu Asp Ser Lys Arg Pro Ser
 1 5

<210> 314
 <211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 314

Tyr Ser Thr Asp Arg Ser Gly Asn His Arg Val

1 5 10

<210> 315

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 315

Arg Tyr Trp Met Ser

1 5

<210> 316

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 316

Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val Lys

1 5 10 15

Gly

<210> 317

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 317

Glu Gly Gly Trp Phe Gly Glu Leu Ala Phe Asp Tyr

1 5 10

<210> 318

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 318

Arg Ala Ser Gln Arg Val Ser Ser Ser Tyr Leu Ala
1 5 10

<210> 319

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 319

Asp Ala Ser Ser Arg Ala Thr
1 5

<210> 320

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 320

Gln Gln Tyr Gly Ser Leu Pro Trp Thr
1 5

<210> 321

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 321

Ser Tyr Trp Met Ser
1 5

<210> 322

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 322

Asn Ile Lys Gln Asp Gly Gly Glu Gln Tyr Tyr Val Asp Ser Val Lys
 1 5 10 15

<210> 323

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 323

Asp Trp Asn Tyr Gly Tyr Tyr Asp Met Asp Val
 1 5 10

<210> 324

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 324

Arg Ala Ser Gln Ser Val Ser Ser Asn Tyr Leu Ala
 1 5 10

<210> 325

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 325

Gly Thr Ser Ser Arg Ala Thr
 1 5

<210> 326

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 326

Gln Gln Tyr Gly Ser Ser Ile Phe Thr
 1 5

<210> 327
 <211> 11
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa is Asp or Val

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa is Val or Ile

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> Xaa is Ser or Asn

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> Xaa is Ala or Phe

<220>
 <221> misc_feature
 <222> (10)..(10)
 <223> Xaa is Val or Leu

<400> 327

Arg Ala Ser Gln Xaa Xaa Xaa Thr Xaa Xaa Ala
 1 5 10

<210> 328
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> Xaa is Phe or Thr

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa is Tyr or Ala

<400> 328

Ser Ala Ser Xaa Leu Xaa Ser
1 5

<210> 329

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (3)..(3)

<223> Xaa is Tyr, Gly, Phe, or Ser

<220>

<221> misc_feature

<222> (4)..(4)

<223> Xaa is Leu, Tyr, Phe, or Trp

<220>

<221> misc_feature

<222> (5)..(5)

<223> Xaa is Tyr, Asn, Ala, Thr, Gly, Phe, or Ile

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa is His, Val, Pro, Thr, or Ile

<220>

<221> misc_feature

<222> (8)..(8)

<223> Xaa is Ala, Trp, Arg, Pro, or Thr

<400> 329

Gln Gln Xaa Xaa Xaa Xaa Pro Xaa Thr
1 5

<210> 330

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa is Asp or Gly

<400> 330

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Phe Thr Phe Ser Xaa Ser Trp Ile His
1 5 10

<210> 331
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<220>
<221> misc_feature
<222> (4)..(4)
<223> Xaa is Ser or Leu

<220>
<221> misc_feature
<222> (10)..(10)
<223> Xaa is Thr or Ser

<400> 331

Ala Trp Ile Xaa Pro Tyr Gly Gly Ser Xaa Tyr Tyr Ala Asp Ser Val
1 5 10 15

Lys Gly

<210> 332
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 332

Arg His Trp Pro Gly Gly Phe Asp Tyr
1 5

<210> 333
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 333

Arg Ala Ser Gln Asp Val Ser Thr Ala Val Ala
1 5 10

<210> 334

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 334

Ser Ala Ser Phe Leu Tyr Ser

1 5

<210> 335

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 335

Gln Gln Tyr Leu Tyr His Pro Ala Thr

1 5

<210> 336

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 336

Gly Phe Thr Phe Ser Asp Ser Trp Ile His

1 5 10

<210> 337

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 337

Ala Trp Ile Ser Pro Tyr Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

1 5 10 15

Lys Gly

<210> 338

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 338

Thr Gly Arg Gly Pro Ser Trp Val
1 5

<210> 339

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 339

Ser Ala Arg Gly Pro Ser Arg Trp
1 5

<210> 340

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 340

Thr Ala Arg Gly Pro Ser Phe Lys
1 5

<210> 341

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 341

Leu Ser Gly Arg Ser Asp Asn His
1 5

<210> 342

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 342

Gly Gly Trp His Thr Gly Arg Asn
1 5

<210> 343

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 343

His Thr Gly Arg Ser Gly Ala Leu
1 5

<210> 344

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 344

Pro Leu Thr Gly Arg Ser Gly Gly
1 5

<210> 345

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 345

Ala Ala Arg Gly Pro Ala Ile His
1 5

<210> 346

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 346

Arg Gly Pro Ala Phe Asn Pro Met

1 5

<210> 347
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 347

Ser Ser Arg Gly Pro Ala Tyr Leu
 1 5

<210> 348
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 348

Arg Gly Pro Ala Thr Pro Ile Met
 1 5

<210> 349
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 349

Arg Gly Pro Ala
 1

<210> 350
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 350

Gly Gly Gln Pro Ser Gly Met Trp Gly Trp
 1 5 10

<210> 351
 <211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 351

Phe Pro Arg Pro Leu Gly Ile Thr Gly Leu

1 5 10

<210> 352

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 352

Val His Met Pro Leu Gly Phe Leu Gly Pro

1 5 10

<210> 353

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 353

Ser Pro Leu Thr Gly Arg Ser Gly

1 5

<210> 354

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 354

Ser Ala Gly Phe Ser Leu Pro Ala

1 5

<210> 355

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 355

Leu Ala Pro Leu Gly Leu Gln Arg Arg
1 5

<210> 356

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 356

Ser Gly Gly Pro Leu Gly Val Arg
1 5

<210> 357

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 357

Pro Leu Gly Leu
1

<210> 358

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 358

Ile Ser Ser Gly Leu Ser Ser
1 5

<210> 359

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 359

Gln Asn Gln Ala Leu Arg Met Ala
1 5

<210> 360
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 360

Ala Gln Asn Leu Leu Gly Met Val
 1 5

<210> 361
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 361

Ser Thr Phe Pro Phe Gly Met Phe
 1 5

<210> 362
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 362

Pro Val Gly Tyr Thr Ser Ser Leu
 1 5

<210> 363
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 363

Asp Trp Leu Tyr Trp Pro Gly Ile
 1 5

<210> 364
 <211> 8
 <212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 364

Ile Ser Ser Gly Leu Leu Ser Ser
1 5

<210> 365

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 365

Leu Lys Ala Ala Pro Arg Trp Ala
1 5

<210> 366

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 366

Gly Pro Ser His Leu Val Leu Thr
1 5

<210> 367

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 367

Leu Pro Gly Gly Leu Ser Pro Trp
1 5

<210> 368

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 368

Met Gly Leu Phe Ser Glu Ala Gly
1 5

<210> 369

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 369

Ser Pro Leu Pro Leu Arg Val Pro
1 5

<210> 370

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 370

Arg Met His Leu Arg Ser Leu Gly
1 5

<210> 371

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 371

Leu Ala Ala Pro Leu Gly Leu Leu
1 5

<210> 372

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 372

Ala Val Gly Leu Leu Ala Pro Pro
1 5

<210> 373
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 373

Leu Leu Ala Pro Ser His Arg Ala
 1 5

<210> 374
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 374

Pro Ala Gly Leu Trp Leu Asp Pro
 1 5

<210> 375
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 375

Gly Pro Arg Ser Phe Gly Leu
 1 5

<210> 376
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 376

Gly Pro Arg Ser Phe Gly
 1 5

<210> 377
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 377

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His
1 5 10

<210> 378

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 378

Ile Ser Ser Gly Leu Leu Ser Ser Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Asp Asn His
20

<210> 379

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 379

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

Ser Ala Asn Pro Arg Gly
20

<210> 380

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 380

Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ala Val
1 5 10 15

Gly Leu Leu Ala Pro Pro

20

<210> 381
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 381

Val His Met Pro Leu Gly Phe Leu Gly Pro Gly Gly Thr Ser Thr Ser
 1 5 10 15

Gly Arg Ser Ala Asn Pro Arg Gly
 20

<210> 382
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 382

Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Val His
 1 5 10 15

Met Pro Leu Gly Phe Leu Gly Pro
 20

<210> 383
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 383

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

Asn His

<210> 384
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 384

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ala Val Gly Leu Leu Ala
 1 5 10 15

Pro Pro

<210> 385

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 385

Val His Met Pro Leu Gly Phe Leu Gly Pro Gly Gly Leu Ser Gly Arg
 1 5 10 15

Ser Asp Asn His
 20

<210> 386

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 386

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Val His Met Pro Leu Gly
 1 5 10 15

Phe Leu Gly Pro
 20

<210> 387

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 387

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Gly Gly Ser Ile Ser

1 5 10 15

Ser Gly Leu Leu Ser Ser
20

<210> 388

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 388

Leu Ser Gly Arg Ser Gly Asn His Gly Gly Ser Gly Gly Ser Ile Ser
1 5 10 15

Ser Gly Leu Leu Ser Ser
20

<210> 389

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 389

Ile Ser Ser Gly Leu Leu Ser Ser Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Gly Asn His
20

<210> 390

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 390

Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Gly Gly Ser Gln Asn
1 5 10 15

Gln Ala Leu Arg Met Ala
20

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 391

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 391

Gln Asn Gln Ala Leu Arg Met Ala Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Asp Asn His
20

<210> 392

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 392

Leu Ser Gly Arg Ser Gly Asn His Gly Gly Ser Gly Gly Ser Gln Asn
1 5 10 15

Gln Ala Leu Arg Met Ala
20

<210> 393

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 393

Gln Asn Gln Ala Leu Arg Met Ala Gly Gly Ser Gly Gly Ser Leu Ser
1 5 10 15

Gly Arg Ser Gly Asn His
20

<210> 394

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 394

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Gly Asn His
1 5 10

<210> 395

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 395

Gly Gln Ser Gly Gln Gly
1 5

<210> 396

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 396

Pro Arg Phe Lys Ile Ile Gly Gly
1 5

<210> 397

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 397

Pro Arg Phe Arg Ile Ile Gly Gly
1 5

<210> 398

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 398

Ser Ser Arg His Arg Arg Ala Leu Asp
1 5

<210> 399
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 399

Arg Lys Ser Ser Ile Ile Ile Arg Met Arg Asp Val Val Leu
 1 5 10

<210> 400
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 400

Ser Ser Ser Phe Asp Lys Gly Lys Tyr Lys Lys Gly Asp Asp Ala
 1 5 10 15

<210> 401
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 401

Ser Ser Ser Phe Asp Lys Gly Lys Tyr Lys Arg Gly Asp Asp Ala
 1 5 10 15

<210> 402
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 402

Ile Glu Gly Arg
 1

<210> 403
 <211> 4
 <212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 403

Ile Asp Gly Arg

1

<210> 404

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 404

Gly Gly Ser Ile Asp Gly Arg

1

5

<210> 405

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 405

Pro Leu Gly Leu Trp Ala

1

5

<210> 406

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 406

Gly Pro Gln Gly Ile Ala Gly Gln

1

5

<210> 407

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 407

Gly Pro Gln Gly Leu Leu Gly Ala
1 5

<210> 408

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 408

Gly Ile Ala Gly Gln
1 5

<210> 409

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 409

Gly Pro Leu Gly Ile Ala Gly Ile
1 5

<210> 410

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 410

Gly Pro Glu Gly Leu Arg Val Gly
1 5

<210> 411

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 411

Tyr Gly Ala Gly Leu Gly Val Val
1 5

<210> 412
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 412

Ala Gly Leu Gly Val Val Glu Arg
 1 5

<210> 413
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 413

Ala Gly Leu Gly Ile Ser Ser Thr
 1 5

<210> 414
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 414

Glu Pro Gln Ala Leu Ala Met Ser
 1 5

<210> 415
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 415

Gln Ala Leu Ala Met Ser Ala Ile
 1 5

<210> 416
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 416

Ala Ala Tyr His Leu Val Ser Gln

1 5

<210> 417

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 417

Met Asp Ala Phe Leu Glu Ser Ser

1 5

<210> 418

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 418

Glu Ser Leu Pro Val Val Ala Val

1 5

<210> 419

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 419

Ser Ala Pro Ala Val Glu Ser Glu

1 5

<210> 420

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 420

Asp Val Ala Gln Phe Val Leu Thr
1 5

<210> 421
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 421

Val Ala Gln Phe Val Leu Thr Glu
1 5

<210> 422
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 422

Ala Gln Phe Val Leu Thr Glu Gly
1 5

<210> 423
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 423

Pro Val Gln Pro Ile Gly Pro Gln
1 5

<210> 424
<211> 273
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 424

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Ser Gly
1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Gly Ser Gly Gly Gly Glu Ile Val Leu Thr Gln Ser Pro Gly
 20 25 30

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
 35 40 45

Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro
 50 55 60

Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr
 65 70 75 80

Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 85 90 95

Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
 100 105 110

Gln Gln Tyr Gly Ser Ser Pro Leu Thr Phe Gly Gly Gly Thr Lys Val
 115 120 125

Glu Ile Lys Arg Ser Gly Gly Ser Thr Ile Thr Ser Tyr Asn Val Tyr
 130 135 140

Tyr Thr Lys Leu Ser Ser Ser Gly Thr Gln Val Gln Leu Val Gln Thr
 145 150 155 160

Gly Gly Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala
 165 170 175

Ala Ser Gly Ser Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln
 180 185 190

Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly
 195 200 205

Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser
 210 215 220

Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg
 225 230 235 240

Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Asn Ser Leu Tyr Trp
 245 250 255

Tyr Phe Asp Leu Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Ala
 Page 166

260

265

270

Ser

<210> 425

<211> 264

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 425

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Ser Gly Gly Gly Ser Gly
 1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gln Val Gln Leu Gln Gln Ser Gly Ala
 20 25 30

Glu Leu Ala Arg Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser
 35 40 45

Gly Tyr Thr Phe Thr Arg Tyr Thr Met His Trp Val Lys Gln Arg Pro
 50 55 60

Gly Gln Gly Leu Glu Trp Ile Gly Tyr Ile Asn Pro Ser Arg Gly Tyr
 65 70 75 80

Thr Asn Tyr Asn Gln Lys Phe Lys Asp Lys Ala Thr Leu Thr Thr Asp
 85 90 95

Lys Ser Ser Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu
 100 105 110

Asp Ser Ala Val Tyr Tyr Cys Ala Arg Tyr Tyr Asp Asp His Tyr Cys
 115 120 125

Leu Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser Gly Gly
 130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Val
 145 150 155 160

Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val
 165 170 175

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr
 180 185 190

Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser
 195 200 205

Lys Leu Ala Ser Gly Val Pro Ala His Phe Arg Gly Ser Gly Ser Gly
 210 215 220

Thr Ser Tyr Ser Leu Thr Ile Ser Gly Met Glu Ala Glu Asp Ala Ala
 225 230 235 240

Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Phe Thr Phe Gly Ser
 245 250 255

Gly Thr Lys Leu Glu Ile Asn Arg
 260

<210> 426

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 426

Ser Cys Leu Met His Pro His Tyr Ala His Asp Tyr Cys Tyr Val
 1 5 10 15

<210> 427

<211> 804

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 427

cagggccagt ccggctcata tctgccctgc cacttcgtgc caatcggggc ctgtaacaat 60

aagggcgggtg gatctagtgg tggctcaggc gggctctggcg gcatttcag tggactcttg 120

tcaggacgat ccgataatca tggcgggtcc gacatccaga tgacacagag cccttcttcc 180

ctctccgcaa gcgttggcga cagggtcacc attacctgta gggcttctca gagcatctca 240

agctatctga actggtacca gcagaaacct ggaaaggctc caaaactgct gatttacgct 300

gcctccagtc ttcagtcagg cgtcccctcc agatttagcg gatcaggtag tggaactgat 360

ttaccctta caatatcttc tctgcagcca gaggacttcg ccacatacta ttgtcagcaa 420

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

gacaatgggt accccagtag attggcgga gggacaaagg tcgagatcaa aaggaccgta 480

gcagcaccaa gcgtcttatt tttcccccc agtgacgaac agctgaagag cggaacagct 540

tcagtgggtg gtctcctgaa taactctat ccacgcgagg caaagggtca gtggaagggtg 600

gacaatgcac tgcagtctgg taattcccaa gaaagtgtta ctgagcagga ttccaaggat 660

tcaacttact ctctgtctag caccctgact ctttctaaag cagattatga gaagcataag 720

gtctacgctt gcgagggtgac ccaccagggg ctttctctc cagttaccaa gtcattcaac 780

cgggggtgagt gttgatgaga attc 804

<210> 428

<211> 264

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 428

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val
 145 150 155 160

Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys
 165 170 175

Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg
 180 185 190

Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn
 195 200 205

Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser
 210 215 220

Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys
 225 230 235 240

Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr
 245 250 255

Lys Ser Phe Asn Arg Gly Glu Cys
 260

<210> 429

<211> 1371

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 429

gaagtgcagc tgctcgaaag cggcggaggc ttggtgcagc caggagggag cctgcgactg 60

tcttgccag ccagcggatt cactttctct tcctatgcca tgagctgggt tcgacaggca 120

cccggcaaag gtctcgagtg ggtgtctagc atctggcgaa acggaatagt tacagtgtat 180

gccgatatcg tgaagggctg ctttactatt tcacgggata attctaagaa caccctctac 240

ctgcaaatga atagccttag ggcagaagat accgccgtgt actactgtgc caaatgttcc 300

gcagcctttg actactgggg ccaggggaca ctggtgaccg tgtcctctgc atcaaccaag 360

gggccatcag tgttccact cgccccatct tccaagagta cttccggcgg aaccgcagcc 420

cttggtgcc ttgtaagga ctatttcca gaaccctga ccgtaagttg gaactctggc 480

gcccttact ctggggtgca caccttcca gcagtgtgc agtccagtg ccttactct 540

ctgtctagtg tagtgactgt gccttctct agtctcgta cccagaccta tatttgaat 600

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

gtttaaccata agcccagcaa tacaaaggtt gataagaaag tggaacccaa gagctgcat 660
 aagacacata cctgccacc ttgtccagct cccgagctgc tgggcggacc ctcatcttt 720
 ctctccac ctaaaccacaa ggataccct atgatctcca ggactctga ggtgacctgc 780
 gttgtggtcg acgtgtcaca tgaggaccct gaggtaaagt ttaactggta cgtggacggt 840
 gtggaggtagc ataacgctaa gactaagcca cgagaggagc aatacgcttc cacttacagg 900
 gtggtcagcg tctgacctg tctccatcag gactggctga acgggaagga atataagtg 960
 aaggtagca acaaagctct cctgcacca atcgagaaga caatcagcaa ggcaaaaggg 1020
 cagcctcggg aacctcaggt ctacaccctc cctcctagca gggaagagat gacaaagaac 1080
 caggctctc tcacctgcct ggtgaaaggc ttctatccat ctgacattgc tgtggagtgg 1140
 gaatccaacg gccagcctga aaataattat aagaccacac ccccgctct tgattccgat 1200
 ggatcttct tctgtacag taaactacc gtcgacaaat cacggtggca gcaaggtaac 1260
 gtgttcagct gttctgtcat gcatgaggct ctgcataacc attacacaca aaagtccttg 1320
 tcattgtctc caggatgatg agaattcatt gatcataatc agccatacca c 1371

<210> 430

<211> 445

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 430

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 Ser Tyr
 20 25 30

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

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val 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
 85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ala Lys Trp Ser Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

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

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

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

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

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

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

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

Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
 225 230 235 240

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

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

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

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

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

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

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
 Page 172

340

345

350

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

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

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

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

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

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

<210> 431

<211> 1362

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 431

gaagtgcagc tgctcgaaag cggcggaggc ttggtgcagc caggagggag cctgcgactg 60

tcttgcgag ccagcggatt cactttctct tcctatgcca tgagctgggt tcgacaggca 120

cccggcaaag gtctcgagtg ggtgtctagc atctggcgaa acggaatagt tacagtgtat 180

gccgatagcg tgaagggctg ctttactatt tcacgggata attctaagaa caccctctac 240

ctgcaaata atagccttag ggcagaagat accgccgtgt actactgtgc caaatggtcc 300

gcagcctttg actactgggg ccaggggaca ctggtgaccg tgtcctctgc atcaaccaag 360

gggccatcag tgttccact cgcccatgt agcagatcaa catctgaatc caccgcagcc 420

cttggtgcc ttgtaagga ctatttcca gaacccgtga ccgtaagtg gaactctggc 480

gcccttact ctgggggtgca caccttcca gcagtgtgc agtccagtgg ccttactct 540

ctgtctagtg tagtgactgt gccttctct agtctcgga ccaagaccta tacctgcaac 600

gtagatcata agcccagcaa taaaagggt gataagagag tagagtcaaa gtacggcca 660

ccctgccac cttgtccagc tcccgagtc ctgggaggac cctcagttt tcttctcca 720

cctaaacca aggataacct tatgatctcc aggactcctg aggtgacctg cgttgtgtgc 780

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

gacgtgtcac aagaggaccc tgaggtacag ttaactggt acgtggacgg tgtggaggta 840
cataacgcta agactaagcc acgagaggag caatttaact ccacttacag ggtggtcagc 900
gtcctgaccg ttcctcatca ggactggctg aacgggaagg aatataagt taaggttagc 960
aaciaaaggtc tgcccagttc tatcgagaag acaatcagca aggcaaaagg gcagcctcgg 1020
gaacctcagg tctacaccct cctccttagc caggaagaga tgacaaagaa ccaggtctct 1080
ctcacctgcc tggtgaaagg cttctatcca tctgacattg ctgtggagt ggaatccaac 1140
ggccagcctg aaaataatta taagaccaca cccccgtcc ttgattccga tggatcttc 1200
ttcctgtaca gtcgcctcac cgtcgacaaa tcacggtggc aggaaggtaa cgtgttcagc 1260
tgttctgtca tgcattgagg tctgcataac cattacacac aaaagtcttt gtcattgtct 1320
ctcggatgat gagaattcat tgatcataat cagccatacc ac 1362

<210> 432
<211> 442
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 432

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 Ser Tyr
20 25 30

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

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val 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
85 90 95

Ala Lys Trp Ser Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

115

120

125

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

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

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

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

Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr
 195 200 205

Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro
 210 215 220

Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
 225 230 235 240

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

Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn
 260 265 270

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
 275 280 285

Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
 290 295 300

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

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

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

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
 355 360 365

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
 370 375 380

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
 385 390 395 400

Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly
 405 410 415

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
 420 425 430

Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly
 435 440

<210> 433

<211> 1371

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 433

gaagtgcagc tgctcgaaag cggcggaggc ttggtgcagc caggagggag cctgcgactg 60

tcctgcgcag ccagcggatt cactttctct tcctatgccca tgagctgggt tcgacaggca 120

cccggcaaag gtctcgatgt ggtgtctagc atctggcgaa acggaatagt tacagtgtat 180

gccgatagcg tgaagggctg ctttactatt tcacgggata attctaagaa caccctctac 240

ctgcaaatga atagccttag ggcagaagat accgccgtgt actactgtgc caaatggtcc 300

gcagccttg actactgggg ccaggggaca ctggtgaccg tgcctctgc atcaaccaag 360

gggccatcag tgttccact cgccccatct tccaagagta ctccggcgg aaccgcagcc 420

cttggtgcc ttgtaagga ctatttccca gaaccctga ccgtaagtgt gaactctggc 480

gcccttact ctggggtgca caccttccca gcagtgtgc agtccagtgg ccttactct 540

ctgtctagt tagtgactgt gccttctct agtctcggt cccagaccta tatttgaat 600

gttaaccata agcccagcaa tacaaggtt gataagaaag tgaacccaa gagctgcgat 660

aagacacata cctgccacc ttgtccagct cccgagctgc tgggcggacc ctactcttt 720

cttctccac ctaaaccxaa ggataccctt atgatctcca ggactcctga ggtgacctgc 780

gttgtggtcg acgtgtcaca taggaccct gaggtaaagt ttaactggta cgtggacggt 840

gtggaggtag ataacgctaa gactaagcca cgagaggagc aatacgcttc cacttacagg 900

gtggtcagcg tcctgaccgt tctccatcag gactggctga acggaagga atataagtg 960
aaggtagca acaaagctct ccctgcacca atcgagaaga caatcagcaa ggcaaaaggg 1020
cagcctcggg aacctcaggt ctacaccctc cctcctagca gggaagagat gacaaagaac 1080
caggctctc tcacctgcct ggtgaaaggc ttctatccat ctgacattgc tgtggagtgg 1140
gaatccaacg gccagcctga aaataattat aagaccacac ccccgctct tgattccgat 1200
ggatctttct tctgtacag taaactcacc gtcgacaaat cacgggtggca gcaaggtaac 1260
gtgttcagct gttctgtcat gcatgaggct ctgcataacc attacacaca aaagtctttg 1320
tcattgtctc caggatgatg agaattcatt gatcataatc agccatacca c 1371

<210> 434

<211> 445

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 434

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 Ser Tyr
20 25 30

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

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val 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
85 90 95

Ala Lys Trp Ser Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

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

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

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

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

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

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

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

Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
 225 230 235 240

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

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

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

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

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

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

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

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

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

<210> 435

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 435

Asn Thr Leu Ser Gly Arg Ser Glu Asn His Ser Gly
1 5 10

<210> 436

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 436

Asn Thr Leu Ser Gly Arg Ser Gly Asn His Gly Ser
1 5 10

<210> 437

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 437

Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly
1 5 10

<210> 438

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 438

Thr Ser Gly Arg Ser Ala Asn Pro

1 5

<210> 439

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 439

Val Ala Gly Arg Ser Met Arg Pro

1 5

<210> 440

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 440

Val Val Pro Glu Gly Arg Arg Ser

1 5

<210> 441

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 441

Ile Leu Pro Arg Ser Pro Ala Phe

1 5

<210> 442

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 442

Met Val Leu Gly Arg Ser Leu Leu
1 5

<210> 443

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 443

Gln Gly Arg Ala Ile Thr Phe Ile
1 5

<210> 444

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 444

Ser Pro Arg Ser Ile Met Leu Ala
1 5

<210> 445

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 445

Ser Met Leu Arg Ser Met Pro Leu
1 5

<210> 446

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 446

Asp Tyr Phe Trp Ser Gly Phe Ser Ala Phe Asp Ile
1 5 10

<210> 447

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 447

Lys Ala Ser Thr Leu Glu Ser

1 5

<210> 448

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 448

Gln Gln Ser Tyr Ser Thr Pro Trp Thr

1 5

<210> 449

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 449

Gln Met Gln Leu Val Gln 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 Ser Tyr

20 25 30

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

35 40 45

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val

50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr

65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ala Arg Asp Tyr Phe Trp Ser Gly Phe Ser Ala Phe Asp Ile Trp Gly
100 105 110

Lys Gly Thr Leu Val Thr Val Ser
115 120

<210> 450

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 450

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

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

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

Tyr Lys Ala Ser Thr Leu Glu 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 Gln Gln Ser Tyr Ser Thr Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 451

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 451

Glu Val Gln Leu Val 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 Gly Ser
 20 25 30

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

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

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

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

Ala Arg Arg His Trp Pro Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ala
 115

<210> 452

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 452

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Tyr Asn Val Pro Trp
 Page 184

85

90

95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 453

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 453

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Tyr Ala Pro Pro Trp
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 454

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 454

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Tyr Thr Val Pro Trp
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 455

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 455

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

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

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

Tyr Ser Ala Ser Thr Leu Ala 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 Gln Gln Tyr Tyr Thr Val Pro Arg
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 456

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 456

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Gly Tyr Gly Val Pro Arg
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 457

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 457

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Leu Phe Thr Pro Pro
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 458

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 458

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Phe Ile Thr Pro Thr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 459

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 459

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Tyr Tyr Thr Pro Pro
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 460

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 460

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Phe Phe Tyr Thr Pro Pro
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 461
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 461

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Ser Leu Phe Thr Pro Pro
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 462
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 462

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Ser Leu Tyr Thr Pro Pro
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 463

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 463

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Ser Trp Tyr His Pro Pro
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 464

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 464

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Phe Tyr Ile Pro Pro
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
 100 105

<210> 465

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 465

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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 Gln Gln Tyr Trp Tyr Thr Pro Thr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 466
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 466

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

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

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Ser Tyr Phe Ile Pro Pro
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 467
<211> 141
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 467

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Met Glu Thr Gly Leu Arg Trp Leu Leu Leu Val Ala Val Leu Lys Gly
 1 5 10 15

Val Gln Cys Leu Ser Val Glu Glu Ser Gly Gly Arg Leu Val Thr Pro
 20 25 30

Gly Thr Pro Leu Thr Leu Thr Cys Thr Ala Ser Gly Phe Thr Ile Thr
 35 40 45

Asn Tyr His Met Phe Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu
 50 55 60

Trp Ile Gly Val Ile Thr Ser Ser Gly Ile Gly Ser Ser Ser Thr Thr
 65 70 75 80

Tyr Tyr Ala Thr Trp Ala Lys Gly Arg Phe Thr Ile Ser Lys Thr Ser
 85 90 95

Thr Thr Val Asn Leu Arg Ile Thr Ser Pro Thr Thr Glu Asp Thr Ala
 100 105 110

Thr Tyr Phe Cys Ala Arg Asp Tyr Phe Thr Asn Thr Tyr Tyr Ala Leu
 115 120 125

Asp Ile Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser
 130 135 140

<210> 468

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 468

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

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

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

Gly Trp Leu His Ala Asp Thr Gly Ile Thr Lys Phe Ser Gln Lys Phe
 50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Leu Val Thr Val Ser Ser
115

<210> 469

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 469

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

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

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

Ser Gly Ile Ser Gly Asn Ser Gly Asn Ile Gly Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Val Pro Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
100 105 110

Ser

<210> 470

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 470

Met Asp Thr Arg Ala Pro Thr Gln Leu Leu Gly Leu Leu Leu Trp
 1 5 10 15

Leu Pro Gly Ala Arg Cys Ala Leu Val Met Thr Gln Thr Pro Ser Ser
 20 25 30

Thr Ser Thr Ala Val Gly Gly Thr Val Thr Ile Lys Cys Gln Ala Ser
 35 40 45

Gln Ser Ile Ser Val Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 50 55 60

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

Pro Ser Arg Phe Lys Gly Ser Arg Ser Gly Thr Glu Tyr Thr Leu Thr
 85 90 95

Ile Ser Gly Val Gln Arg Glu Asp Ala Ala Thr Tyr Tyr Cys Leu Gly
 100 105 110

Ser Ala Gly Ser
 115

<210> 471

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 471

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 Ser Tyr
 20 25 30

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Ser Ile Tyr Pro Ser Gly Gly Ile Thr Phe Tyr Ala Asp Thr 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
85 90 95

Ala Arg Ile Lys Leu Gly Thr Val Thr Thr Val Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 472

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 472

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

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
85 90 95

Ser Thr Arg Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
100 105 110

<210> 473

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 473

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

Thr Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Ser Asp
 20 25 30

Tyr Trp Asn Trp Ile Arg Lys Phe Pro Gly Asn Lys Leu Glu Tyr Val
 35 40 45

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

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

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

Arg Tyr Gly Gly Trp Leu Ser Pro Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Thr Leu Thr Val Ser Ser
 115

<210> 474

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 474

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

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Val Met Trp Ala Gly Gly Gly Thr Asn Ser Asn Ser Val Leu Lys
50 55 60

Ser Arg Leu Ile Ile Ser Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

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

Arg Tyr Tyr Gly Asn Ser Pro Tyr Tyr Ala Ile Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 475

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 475

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

Thr Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Ile Ser Asp
20 25 30

Tyr Trp Asn Trp Ile Arg Lys Phe Pro Gly Asn Lys Leu Glu Tyr Leu
35 40 45

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

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

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

Arg Arg Gly Gly Trp Leu Leu Pro Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Leu Thr Val Ser Ser
115

<210> 476
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 476

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

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

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

Gly Trp Ile Phe Pro Arg Asp Asn Asn Thr Lys Tyr Asn Glu Asn Phe
 50 55 60

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

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

Thr Lys Glu Asn Trp Val Gly Asp Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Thr Leu Thr Leu Ser Ser
 115

<210> 477
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 477

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Tyr Met Asn Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
35 40 45

Gly Asp Ile Asp Pro Asn Tyr Gly Gly Thr Thr Tyr Asn Gln Lys Phe
50 55 60

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

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

Ala Arg Gly Ala Leu Thr Asp Trp Gly Gln Gly Thr Ser Leu Thr Val
100 105 110

Ser Ser

<210> 478

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 478

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 Ser Ser Val Ser Tyr Ile
20 25 30

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

Ala Ala Phe Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
65 70 75 80

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Asn Asn Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 479
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 479

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

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

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

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

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

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

Ala Arg Gly Ala Leu Thr Asp Trp Gly Gln Gly Thr Met Val Thr Val
 100 105 110

Ser Ser

<210> 480
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 480

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Gly Asp Ile Asp Pro Asn Tyr Gly Gly Thr Asn Tyr Asn Gln Lys Phe
50 55 60

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

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

Ala Arg Gly Ala Leu Thr Asp Trp Gly Gln Gly Thr Met Val Thr Val
100 105 110

Ser Ser

<210> 481

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 481

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

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

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

Gly Asp Ile Asp Pro Asn Tyr Gly Gly Thr Asn Tyr Asn Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Val Asp Arg Ser Ser Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Ala Leu Thr Asp Trp Gly Gln Gly Thr Met Val Thr Val
100 105 110

Ser Ser

<210> 482

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 482

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

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

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

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

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

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

Thr Arg Gly Ala Leu Thr Asp Trp Gly Gln Gly Thr Met Val Thr Val
100 105 110

Ser Ser

<210> 483

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 483

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

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

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

Ala Arg Gly Ala Leu Thr Asp Trp Gly Gln Gly Thr Met Val Thr Val
100 105 110

Ser Ser

<210> 484

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 484

Asp Ile Val Met Thr Gln Ser His Lys Leu Met Ser Thr Ser Val Gly
1 5 10 15

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

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

Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Asp Arg Phe Thr Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser
65 70 75 80

Glu Asp Leu Ala Asp Tyr Phe Cys Gln Gln Asp Ser Ser Tyr Pro Leu
85 90 95

Thr Phe Gly Ala Gly Thr Lys Val Glu Leu Lys
 100 105

<210> 485
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 485

Asp Ile Val Thr Thr Gln Ser His Lys Leu Met Ser Thr Ser Val Gly
 1 5 10 15

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

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

Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Asp Arg Phe Thr Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser
 65 70 75 80

Glu Asp Leu Ala Asp Tyr Phe Cys Gln Gln Asp Ser Ser Tyr Pro Leu
 85 90 95

Thr Phe Gly Ala Gly Thr Lys Val Glu Leu Lys
 100 105

<210> 486
 <211> 113
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 486

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

Glu Lys Val Ser Met Gly Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

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

Tyr Tyr Gly Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
100 105 110

Lys

<210> 487

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 487

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

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Arg Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Thr Ser Pro Lys Arg Trp Ile Ser
35 40 45

Asp Thr Ser Lys Leu Thr Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Ser Tyr Ala Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys His Gln Arg Ser Ser Tyr Pro Trp Thr
85 90 95

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 488
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 488

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

Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ser Ser Val Ser Tyr Ile
 20 25 30

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

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Glu Thr Glu
 65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Asn Asn Pro Leu Thr
 85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
 100 105

<210> 489
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 489

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 Ser Ser Val Ser Tyr Ile
 20 25 30

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

Ala Ala Phe Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Ser
 50 55 60

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
 65 70 75 80

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Asn Asn Pro Leu Thr
 85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 490

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 490

Gln 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 Ser Ser Val Ser Tyr Ile
 20 25 30

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

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

Gly Ser Gly Thr Ser Tyr Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 65 70 75 80

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Asn Asn Pro Leu Thr
 85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 491

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 491

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

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

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

Ala Ala Phe Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
 50 55 60

Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
 65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Asn Asn Pro Leu Thr
 85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 492

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 492

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

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

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

Ala Ala Phe Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
 50 55 60

Gly Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
 65 70 75 80

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Asn Asn Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 493

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 493

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

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

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

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

Gly Ser Gly Thr Ser Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Asn Asn Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 494

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 494

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Ala Leu Pro Ser Gly Thr Ile Leu Val Gly Gly Trp Phe Asp
100 105 110

Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 495

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 495

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

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

Ser Ala Ile Ser Gly Gly Gly Gly 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
85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 496

<211> 128

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 496

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

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

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

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

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

Ala Lys Val Leu Leu Pro Cys Ser Ser Thr Ser Cys Tyr Gly Ser Val
100 105 110

Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 497

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 497

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gln Val Gln Leu Val Gln Ser Gly Gly Ser Val Val Arg Pro Gly Glu
 1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Ile Phe Asp Asn Tyr
 20 25 30

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

Ser Arg Val Asn Trp Asn Gly Gly Ser Thr Thr Tyr Ala Asp Ala Val
 50 55 60

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

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

Val Arg Glu Phe Val Gly Ala Tyr Asp Leu Trp Gly Gln Gly Thr Thr
 100 105 110

Val Thr Val Ser Ser
 115

<210> 498

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 498

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

Thr Val Lys Val Ser Cys Lys Val Phe Gly Asp Thr Phe Arg Gly Leu
 20 25 30

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

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Ala Ser Gly Leu Arg Trp Gly Ile Trp Gly Trp Phe Asp Pro Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 499
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 499

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

Ser Val Lys Val Ser Cys Lys Ala Phe Gly Gly Thr Phe Ser Asp Asn
20 25 30

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

Gly Gly Ile Ile Pro Ile Phe Gly Lys Pro 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 Val Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Thr Met Val Arg Gly Phe Leu Gly Val Met Asp Val Trp Gly
100 105 110

Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 500
<211> 125
<212> PRT
<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 500

Gln Val Gln Leu Val Gln 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 Ser Tyr
 20 25 30

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

Ser Ala Ile Ser Gly Ser Gly Gly 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
 85 90 95

Ala Lys Asp Gln Phe Val Thr Ile Phe Gly Val Pro Arg Tyr Gly Met
 100 105 110

Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120 125

<210> 501

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 501

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys 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 Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe Trp Gly Pro
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 502

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 502

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

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

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

Gly Arg Ile Val Pro Leu Ile Gly Leu Val Asn Tyr Ala His Asn Phe
50 55 60

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

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

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

Leu Val Thr Val Ser Ser
115

<210> 503

<211> 120

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 503

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

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

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

Gly Trp Ile Ser Ala His Asn Gly His Ala Ser Asn Ala Gln Lys Val
50 55 60

Glu Asp Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

Ala Arg Val His Ala Ala Leu Tyr Tyr Gly Met Asp Val Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 504

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 504

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe Ser Arg His
20 25 30

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ala Val Ile Ser His Asp Gly Ser Val Lys Tyr Tyr Ala Asp Ser Met
50 55 60

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

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

Ala Arg Gly Leu Ser Tyr Gln Val Ser Gly Trp Phe Asp Pro Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 505

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 505

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
1 5 10 15

Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Ser Ile Ala Ser Asn
20 25 30

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ser Pro Thr Thr Val
35 40 45

Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Ile Asp Thr Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
65 70 75 80

Leu Lys Thr Lys Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Gly
85 90 95

Ile Thr Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 506

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 506

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Gly Ser Pro Gly Lys
 1 5 10 15

Thr Val Thr Leu Pro Cys Thr Arg Ser Ser Gly Ser Ile Ala Ser His
 20 25 30

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ala Pro Thr Thr Val
 35 40 45

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

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Ser Ile Ser Gly
 65 70 75 80

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

Ser Asn Arg Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 507

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 507

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

Ser Ala Ser Leu Thr Cys Thr Leu Arg Ser Gly Leu Asn Val Gly Ser
 20 25 30

Tyr Arg Ile Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Arg Pro Gln Tyr
 35 40 45

Leu Leu Asn Tyr Lys Ser Asp Ser Asn Lys Gln Gln Ala Ser Gly Val
 50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Ser Arg Phe Ser Gly Ser Lys Asp Ala Ser Ala Asn Ala Gly Ile
65 70 75 80

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

Met Ile Trp Tyr Ser Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu
100 105 110

Thr Val Leu
115

<210> 508

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 508

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
1 5 10 15

Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Asn Ile Ala Ser Asn
20 25 30

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ala Pro Thr Thr Val
35 40 45

Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
65 70 75 80

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

Ser Asn Leu Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 509

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 509

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

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

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

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
 50 55 60

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
 85 90 95

Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
 100 105

<210> 510

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 510

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

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

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

Ser Asp Arg Asp Arg Pro Ser Gly Ile Ser Glu Arg Phe Ser Gly Ser
 50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Asn Asn Ser Asp His
85 90 95

Tyr Val Phe Gly Ala Gly Thr Glu Leu Ile Val Leu
100 105

<210> 511

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 511

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

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
85 90 95

Thr Leu Pro Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 512

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 512

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

Ser Gly Ala Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His Thr Ile Pro Thr Phe
 85 90 95

Ser Phe Gly Pro Gly Thr Lys Val Glu Val Lys
 100 105

<210> 513

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 513

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

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

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

Tyr Ala Ala Ser Thr 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 Asn Leu Gln Pro
 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Leu Asn Asn Tyr Pro Ile
 85 90 95

Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 514

<211> 105

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 514

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

Thr Ala Asn Ile Pro Cys Ser Gly Asp Lys Leu Gly Asn Lys Tyr Ala
 20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Val Leu Leu Ile Tyr
 35 40 45

Gln Asp Ile Lys Arg Pro Ser Arg Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60

Asn Ser Ala Asp Thr Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Thr Trp Asp Asn Ser Val Val Phe
 85 90 95

Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 515

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 515

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
 1 5 10 15

Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Ser Ile Asp Ser Asn
 20 25 30

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ala Pro Thr Thr Val
 35 40 45

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
65 70 75 80

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

Asn Asn Arg His Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 516

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 516

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
1 5 10 15

Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Asn Ile Gly Thr Asn
20 25 30

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

Ile Tyr Glu Asp Tyr Arg Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Ile Ile Ser Gly
65 70 75 80

Leu Lys Pro Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr His Ser
85 90 95

Ser Gly Trp Glu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 517

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 517

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

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

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

Asp Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
 85 90 95

Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 518

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 518

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
 1 5 10 15

Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Ser Ile Ala Ser Asn
 20 25 30

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ala Pro Thr Thr Val
 35 40 45

Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
 65 70 75 80

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Thr Thr Pro Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 519

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 519

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

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

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

Gly Trp Thr Ser Pro His Asn Gly Leu Thr Ala Phe Ala Gln Ile Leu
50 55 60

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Asn Leu Thr Phe Asp Asp Thr Ala Val Tyr Phe Cys
85 90 95

Ala Lys Val His Pro Val Phe Ser Tyr Ala Leu Asp Val Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 520

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 520

Glu Val Gln Leu Val Glu Ser Gly Ala Glu Val Met Asn Pro Gly Ser

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

1 5 10 15

Ser Val Arg Val Ser Cys Arg Gly Ser Gly Gly Asp Phe Ser Thr Tyr
20 25 30

Ala Phe 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 Ile Ala Asn Tyr Ala Gln Lys Phe
50 55 60

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

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

Ala Arg Asp Gly Tyr Gly Ser Asp Pro Val Leu Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 521

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 521

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

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

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

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Val
50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Gly Tyr
65 70 75 80

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Ala Arg Gly Asp Phe Arg Lys Pro Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 522

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 522

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

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

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

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

Lys Gly Arg Ala Thr Leu Thr Ser Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gln Ala Trp Gly Tyr Pro Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 523

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 523

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

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

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

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

Lys Gly Arg Ala Thr Leu Thr Ser Asp Lys 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 Gln Ala Trp Gly Tyr Pro Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser
 115

<210> 524

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 524

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

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

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Lys Gly Arg Ala Thr Leu Thr Ser Asp Lys 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 Gln Ala Trp Gly Tyr Pro Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 525

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 525

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

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

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

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

Lys Gly Arg Ala Thr Leu Thr Ser Asp Lys 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 Gln Ala Trp Gly Tyr Pro Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 526

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 526

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

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

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

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

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

Val Ser Ser
 115

<210> 527

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 527

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Thr Glu Ser Val Glu Tyr Tyr
 20 25 30

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

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

<210> 528

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 528

Asp 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 Thr Glu Ser Val Glu Tyr Tyr
 20 25 30

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

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

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

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

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

<210> 529

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 529

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 Thr Glu Ser Val Glu Tyr Tyr
 20 25 30

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

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

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

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

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

<210> 530

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 530

Asp 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 Thr Glu Ser Val Glu Tyr Tyr
 20 25 30

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

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

<210> 531

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 531

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys 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 Glu Gly Thr Ile Tyr Asp Ser Ser Gly Tyr Ser Phe Asp Tyr
 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 532

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 532

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 Page 236

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Gln Gly Arg Val Ser Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
 65 70 75 80

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

Ala Arg Asp Leu Phe Pro His Ile Tyr Gly Asn Tyr Tyr Gly Met Asp
 100 105 110

Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 533

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 533

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Ala Arg Leu Ala Val Pro Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 534

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 534

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

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

Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys Gly Arg
 50 55 60

Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met
 65 70 75 80

Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly
 85 90 95

Gln Trp Leu Val Thr Glu Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser
 115

<210> 535

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 535

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

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

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

Gly Gly Ile Ile Pro Met Phe Ala Thr Pro Tyr Tyr Ala Gln Lys Phe
 50 55 60

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

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

Ala Arg Asp Arg Gly Arg Gly His Leu Pro Trp Tyr Phe Asp Leu Trp
 100 105 110

Gly Arg Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 536

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 536

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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 Ala Pro Tyr Tyr Tyr Tyr Tyr Met Asp Val Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 537

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 537

Glu Val Gln Leu Leu Glu 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 Leu Ser Arg Tyr
20 25 30

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

Gly Ala Ile Ile Pro Ile Phe Gly Thr Pro His Tyr Ser Lys Lys Phe
50 55 60

Gln Asp Arg Val Ile Ile Thr Val Asp Thr Ser Thr Asn Thr Ala Phe
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Phe Glu Asp Thr Ala Leu Tyr Phe Cys
85 90 95

Ala Arg Gly His Asp Glu Tyr Asp Ile Ser Gly Tyr His Arg Leu Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 538

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 538

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

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

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

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Leu Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Glu Asn Leu Trp Gln Phe Gly Tyr Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 539

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 539

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 Arg Tyr
20 25 30

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

Ala Ser Val Gly Gln Gln Leu Pro Trp Val Phe Phe Ala Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 540

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 540

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

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

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 541
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 541

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

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

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 542
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 542

Glu Val Gln Leu Val Gln 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 Asp Tyr
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Ala Val Ile Ser Tyr Asp Gly Ser Tyr Lys Ile His Ala Asp Ser Val
 50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Val Phe
 65 70 75 80

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

Thr Thr Asp Arg Lys Trp Leu Ala Trp His Gly Met Asp Val Trp Gly
 100 105 110

Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 543

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 543

Glu 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 Gly Ile Ile Pro Ile Phe 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 Asp Gly Ile Val Ala Asp Phe Gln His Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
115

<210> 544

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 544

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

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

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

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

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

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

Ala Arg Asp His Phe Tyr Gly Ser Gly Gly Tyr Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 545

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 545

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

Gly Gly Ile Ile Pro Val Phe Gly Thr Ala Asn Tyr Ala Glu Ser Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp His Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Arg Trp His Tyr Glu Ser Arg Pro Met Asp Val Trp Gly
100 105 110

Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 546

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 546

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Arg Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ala Cys Ala Ala Ser Gly Phe Ser Phe Ser Asp Tyr
20 25 30

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

Ala Tyr Ile Ser Asp Ser Gly Gln Thr Val His Tyr Ala Asp Ser Val
50 55 60

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

Leu Gln Val Asn Thr Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ala Arg Glu Asp Leu Leu Gly Tyr Tyr Leu Gln Ser Trp Gly Gln Gly
 100 105 110

Thr Leu Val Thr Val Ser Ser
 115

<210> 547

<211> 131

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 547

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

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
 20 25 30

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

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Ala
 50 55 60

Val Ser Val Lys Ser Arg Ile Thr Ile Asn Pro Asp Thr Ser Lys Asn
 65 70 75 80

Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val
 85 90 95

Tyr Tyr Cys Ala Arg Asp Glu Pro Arg Ala Val Ala Gly Ser Gln Ala
 100 105 110

Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 115 120 125

Val Ser Ser
 130

<210> 548

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 548

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

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

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

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val His
 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 Asp Leu Phe Pro His Ile Tyr Gly Asn Tyr Tyr Gly Met Asp
 100 105 110

Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 549

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 549

Gln Met Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

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

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 550

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 550

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

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

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 551

<211> 110

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 551

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

Lys Val Thr Ile Ser Cys Ser Gly Asn Asn Ser Asn Ile Ala Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

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

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

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Val Trp Asp Gly Ser Leu
85 90 95

Thr Thr Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 552

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 552

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

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

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Leu Ala Thr Tyr Tyr Cys Gln Gln Leu His Thr Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 553

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 553

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

Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Ala Tyr
20 25 30

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

Met Ile Tyr Glu Val Asn Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Ala Gly Thr
85 90 95

Asn Ser Leu Gly Ile Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 554

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 554

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asp Ile Gly Asn His
 20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45

Ile Tyr Asp Asn Asn Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Ala Ile Thr Gly Leu Gln
 65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Asn Ser Leu
 85 90 95

Ser Pro His Leu Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 555

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 555

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

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Met Gly Asn Asn
 20 25 30

Tyr Val Ser Trp Tyr Lys Gln Val Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45

Ile Tyr Glu Asn Asp Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
 65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Asn Ser Leu
 85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Gly Phe Val Phe Ala Ser Gly Thr Lys Val Thr Val Leu
100 105 110

<210> 556
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 556

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

Ser Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asp Val Gly Ser Tyr
20 25 30

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

Met Ile Tyr Asp Val Ser Lys Arg Ser Gly Val Ser Asn Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln
65 70 75 80

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Gly Ile Ser
85 90 95

Thr Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 557
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 557

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

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Ser Tyr
20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65 70 75 80

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

Asn Asn Leu Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 558

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 558

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

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

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

Tyr Ala Ala Ser Ser Leu Arg 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 Gln Gln Thr Tyr Ser Ser Pro Trp
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 559

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 559

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

Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Ile Gly Gly Tyr
20 25 30

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
85 90 95

Ser Ile Phe Phe Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
100 105 110

<210> 560

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 560

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

Ser Ile Thr Ile Ser Cys Thr Gly Thr Thr Ser Asp Ile Gly Gly Tyr
20 25 30

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
85 90 95

Ser Thr His Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 561

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 561

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

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Ser Ser
85 90 95

Thr Leu Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 562

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 562

Gln Ala Gly Leu Thr Gln Pro Pro Ser Val Ser Glu Ala Pro Arg Gln
Page 256

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

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

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

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 563

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 563

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

Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

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

Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Thr Thr His Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
 100 105 110

<210> 564

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 564

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45

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

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
 65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
 85 90 95

Ser Val Trp Val Phe Gly Gly Gly Thr Gln Leu Thr Val Leu
 100 105 110

<210> 565

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 565

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

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Arg Ala Pro Arg Leu
 Page 258

35 40 45

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Gly Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Gly
85 90 95

Gly Thr Leu Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 566

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 566

Gln Ala Gly Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
20 25 30

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

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

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
85 90 95

Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 567

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 567

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

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

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

Tyr Ala 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 Gln Gln Thr Tyr Ser Thr Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 568

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 568

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

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 Page 260

65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Asp Ser

 85 90 95

Ser Thr Arg Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu

 100 105 110

<210> 569
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 569

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln

1 5 10 15

Arg Val Ala Ile Ser Cys Ser Gly Ser Arg Ser Asn Ile Glu Ile Asn

 20 25 30

Ser Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu

 35 40 45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser

 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln

65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Ser Trp Asp Ser Ser Leu

 85 90 95

Ser Ala Asp Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu

 100 105 110

<210> 570
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 570

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Lys

1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45

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

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu
 85 90 95

Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 571

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 571

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln
 1 5 10 15

Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly
 20 25 30

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

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

Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Glu Phe Phe Cys Gly Thr Trp Asp Ser Arg
 85 90 95

Leu Thr Thr Tyr Val Phe Gly Ser Gly Thr Lys Leu Thr Val Leu

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

100

105

110

<210> 572

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 572

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln

1

5

10

15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn

20

25

30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu

35

40

45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser

50

55

60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln

65

70

75

80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu

85

90

95

Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu

100

105

110

<210> 573

<211> 103

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 573

Val Ile Trp Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

1

5

10

15

Asp Arg Val Thr Ile Thr Cys Ala Ala Ser Ser Leu Gln Ser Trp Tyr

20

25

30

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Glu Ala Ser

35

40

45

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

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
65 70 75 80

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Tyr Thr Phe Gly Gln
85 90 95

Gly Thr Lys Leu Glu Ile Lys
100

<210> 574

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 574

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Val Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

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

Gly Ser Asn Ser Asp Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
85 90 95

Ser Ala Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 575

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 575

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45

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

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
 65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
 85 90 95

Ser Ala Gly Ser Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 576

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 576

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

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

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

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

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Leu Val Trp Asp Ser Ser Ser Asp His
 85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 577

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 577

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

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

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

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

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
 85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 578

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 578

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 579

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 579

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

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

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

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

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 580

<211> 447

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 580

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

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

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

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

Lys Asn Arg Val Thr Leu Thr Thr Asp Ser Ser Thr Thr Thr Ala Tyr
 65 70 75 80

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

Ala Arg Arg Asp Tyr Arg Phe Asp Met Gly Phe Asp Tyr Trp Gly Gln
 100 105 110

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

Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
 130 135 140

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

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

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

Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys
 Page 268

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

195

200

205

Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro
 210 215 220

Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val
 225 230 235 240

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

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

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

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

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

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

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

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

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

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

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

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

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

<210> 581

<211> 440

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 581

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Asp Cys Lys Ala Ser Gly Ile Thr Phe Ser Asn Ser
 20 25 30

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

Ala Val Ile Trp Tyr Asp Gly Ser Lys Arg Tyr Tyr Ala Asp Ser Val
 50 55 60

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

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

Ala Thr Asn Asp Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
 100 105 110

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

Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
 130 135 140

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
 145 150 155 160

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

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

Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp
 Page 270

195

200

205

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

Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 225 230 235 240

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

Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val
 260 265 270

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
 275 280 285

Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
 290 295 300

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly
 305 310 315 320

Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
 325 330 335

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr
 340 345 350

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
 355 360 365

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
 370 375 380

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
 385 390 395 400

Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe
 405 410 415

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
 420 425 430

Ser Leu Ser Leu Ser Leu Gly Lys
 435 440

<210> 582

<211> 218

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 582

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 Lys Gly Val Ser Thr Ser
 20 25 30

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

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

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

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

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

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

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

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

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

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

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro

195

200

205

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

<210> 583

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 583

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 Ser Ser Tyr
20 25 30

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

Tyr Asp 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 Gln Gln Ser Ser Asn Trp Pro Arg
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

Phe Asn Arg Gly Glu Cys
 210

<210> 584
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> Xaa is His or Asn

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> Xaa is Ser or Thr

<220>
 <221> misc_feature
 <222> (10)..(10)
 <223> Xaa is Arg or Ser

<400> 584

Lys Ser Ser Gln Ser Leu Leu Xaa Xaa Xaa Thr Arg Lys Asn Tyr Leu
 1 5 10 15

Ala

<210> 585
 <211> 290
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 585

Met Arg Ile Phe Ala Val Phe Ile Phe Met Thr Tyr Trp His Leu Leu
 1 5 10 15

Asn Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr
 Page 274

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

20

25

30

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

Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile
50 55 60

Ile Gln Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser
65 70 75 80

Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
85 90 95

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
100 105 110

Arg Cys Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val
115 120 125

Lys Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val
130 135 140

Asp Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr
145 150 155 160

Pro Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser
165 170 175

Gly Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn
180 185 190

Val Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr
195 200 205

Cys Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu
210 215 220

Val Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr His
225 230 235 240

Leu Val Ile Leu Gly Ala Ile Leu Leu Cys Leu Gly Val Ala Leu Thr
245 250 255

Phe Ile Phe Arg Leu Arg Lys Gly Arg Met Met Asp Val Lys Lys Cys
260 265 270

Gly Ile Gln Asp Thr Asn Ser Lys Lys Gln Ser Asp Thr His Leu Glu
 275 280 285

Glu Thr
 290

<210> 586

<211> 290

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 586

Met Arg Ile Phe Ala Gly Ile Ile Phe Thr Ala Cys Cys His Leu Leu
 1 5 10 15

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

Gly Ser Asn Val Thr Met Glu Cys Arg Phe Pro Val Glu Arg Glu Leu
 35 40 45

Asp Leu Leu Ala Leu Val Val Tyr Trp Glu Lys Glu Asp Glu Gln Val
 50 55 60

Ile Gln Phe Val Ala Gly Glu Glu Asp Leu Lys Pro Gln His Ser Asn
 65 70 75 80

Phe Arg Gly Arg Ala Ser Leu Pro Lys Asp Gln Leu Leu Lys Gly Asn
 85 90 95

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
 100 105 110

Cys Cys Ile Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Leu
 115 120 125

Lys Val Asn Ala Pro Tyr Arg Lys Ile Asn Gln Arg Ile Ser Val Asp
 130 135 140

Pro Ala Thr Ser Glu His Glu Leu Ile Cys Gln Ala Glu Gly Tyr Pro
 145 150 155 160

Glu Ala Glu Val Ile Trp Thr Asn Ser Asp His Gln Pro Val Ser Gly
 Page 276

165 170 175

Lys Arg Ser Val Thr Thr Ser Arg Thr Glu Gly Met Leu Leu Asn Val
180 185 190

Thr Ser Ser Leu Arg Val Asn Ala Thr Ala Asn Asp Val Phe Tyr Cys
195 200 205

Thr Phe Trp Arg Ser Gln Pro Gly Gln Asn His Thr Ala Glu Leu Ile
210 215 220

Ile Pro Glu Leu Pro Ala Thr His Pro Pro Gln Asn Arg Thr His Trp
225 230 235 240

Val Leu Leu Gly Ser Ile Leu Leu Phe Leu Ile Val Val Ser Thr Val
245 250 255

Leu Leu Phe Leu Arg Lys Gln Val Arg Met Leu Asp Val Glu Lys Cys
260 265 270

Gly Val Glu Asp Thr Ser Ser Lys Asn Arg Asn Asp Thr Gln Phe Glu
275 280 285

Glu Thr
290

<210> 587

<211> 288

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 587

Met Arg Ile Phe Ala Val Phe Ile Phe Met Thr Tyr Trp His Leu Leu
1 5 10 15

Asn Ala Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr
20 25 30

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

Asp Leu Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile
50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ile Gln Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser
 65 70 75 80

Tyr Arg Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn
 85 90 95

Ala Ala Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr
 100 105 110

Arg Cys Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val
 115 120 125

Lys Val Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val
 130 135 140

Asp Pro Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr
 145 150 155 160

Pro Lys Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser
 165 170 175

Gly Lys Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn
 180 185 190

Val Thr Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr
 195 200 205

Cys Thr Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu
 210 215 220

Val Ile Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr His
 225 230 235 240

Leu Val Ile Leu Gly Ala Ile Leu Leu Cys Leu Gly Val Ala Leu Thr
 245 250 255

Phe Ile Phe Arg Leu Arg Lys Gly Arg Met Met Asp Val Lys Cys Gly
 260 265 270

Ile Gln Asp Thr Asn Ser Lys Gln Ser Asp Thr His Leu Glu Glu Thr
 275 280 285

<210> 588

<211> 221

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 588

Phe Thr Val Thr Val Pro Lys Asp Leu Tyr Val Val Glu Tyr Gly Ser
 1 5 10 15

Asn Met Thr Ile Glu Cys Lys Phe Pro Val Glu Lys Gln Leu Asp Leu
 20 25 30

Ala Ala Leu Ile Val Tyr Trp Glu Met Glu Asp Lys Asn Ile Ile Gln
 35 40 45

Phe Val His Gly Glu Glu Asp Leu Lys Val Gln His Ser Ser Tyr Arg
 50 55 60

Gln Arg Ala Arg Leu Leu Lys Asp Gln Leu Ser Leu Gly Asn Ala Ala
 65 70 75 80

Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Arg Cys
 85 90 95

Met Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Val Lys Val
 100 105 110

Asn Ala Pro Tyr Asn Lys Ile Asn Gln Arg Ile Leu Val Val Asp Pro
 115 120 125

Val Thr Ser Glu His Glu Leu Thr Cys Gln Ala Glu Gly Tyr Pro Lys
 130 135 140

Ala Glu Val Ile Trp Thr Ser Ser Asp His Gln Val Leu Ser Gly Lys
 145 150 155 160

Thr Thr Thr Thr Asn Ser Lys Arg Glu Glu Lys Leu Phe Asn Val Thr
 165 170 175

Ser Thr Leu Arg Ile Asn Thr Thr Thr Asn Glu Ile Phe Tyr Cys Thr
 180 185 190

Phe Arg Arg Leu Asp Pro Glu Glu Asn His Thr Ala Glu Leu Val Ile
 195 200 205

Pro Glu Leu Pro Leu Ala His Pro Pro Asn Glu Arg Thr
 210 215 220

<210> 589

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 589

Trp Ala Ser Thr Arg Glu Ser

1 5

<210> 590

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(1)

<223> Xaa is Gln or Lys

<400> 590

Xaa Gln Ser Tyr Asp Val Val Thr

1 5

<210> 591

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (4)..(4)

<223> Xaa is Ile or Met

<400> 591

Ser Tyr Trp Xaa His

1 5

<210> 592

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> Xaa is Asp or Gly

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> Xaa is His or Asn

<220>
 <221> misc_feature
 <222> (12)..(12)
 <223> Xaa is Ser or Asn

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> Xaa is Glu or Gln

<220>
 <221> misc_feature
 <222> (16)..(16)
 <223> Xaa is Ile or Met

<400> 592

Tyr Ile Asn Pro Ser Ser Xaa Tyr Xaa Glu Tyr Xaa Xaa Lys Phe Xaa
 1 5 10 15

Asp

<210> 593
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa is Ile or Val

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> Xaa is Phe or Tyr

<400> 593

Ser Gly Trp Leu Xaa His Gly Asp Tyr Tyr Phe Asp Xaa
 1 5 10

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 594
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 594

Lys Ser Ser Gln Ser Leu Leu Asn Ser Arg Thr Arg Lys Asn Tyr Leu
 1 5 10 15

Ala

<210> 595
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 595

Gln Gln Ser Tyr Asp Val Val Thr
 1 5

<210> 596
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 596

Ser Tyr Trp Met His
 1 5

<210> 597
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 597

Tyr Ile Asn Pro Ser Ser Asp Tyr Asn Glu Tyr Ser Glu Lys Phe Met
 1 5 10 15

Asp

<210> 598
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 598

Ser Gly Trp Leu Val His Gly Asp Tyr Tyr Phe Asp Tyr
 1 5 10

<210> 599
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 599

Lys Ser Ser Gln Ser Leu Leu His Thr Ser Thr Arg Lys Asn Tyr Leu
 1 5 10 15

Ala

<210> 600
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 600

Lys Gln Ser Tyr Asp Val Val Thr
 1 5

<210> 601
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 601

Gly Tyr Ile Phe Thr Ser Tyr Trp Met His

1 5 10

<210> 602
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 602

Tyr Ile Asn Pro Ser Ser Gly Tyr His Glu Tyr Asn Gln Lys Phe Ile
 1 5 10 15

Asp

<210> 603
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 603

Ser Gly Trp Leu Ile His Gly Asp Tyr Tyr Phe Asp Phe
 1 5 10

<210> 604
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 604

Ser Tyr Trp Ile His
 1 5

<210> 605
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 605

Gly Thr Thr Phe Thr Ser Tyr Trp Ile His
 1 5 10

<210> 606
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> Xaa is Asn or Ser

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa is Thr, Arg or Ser

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> Xaa is Ala or Gly

<400> 606

Thr Gly Thr Xaa Xaa Asp Val Gly Xaa Tyr Asn Tyr Val Ser
 1 5 10

<210> 607
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa is Glu or Asp

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa is Ile, Asn or Asp

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> Xaa is Asp, His or Asn

<400> 607

Xaa Val Xaa Xaa Arg Pro Ser
 1 5

<210> 608
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa is Phe or Tyr

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa is Asn or Ser

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa is Arg, Thr or Ser

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> Xaa is Gly or Ser

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> Xaa is Ile or Thr

<400> 608

Ser Ser Xaa Thr Xaa Xaa Xaa Xaa Arg Val
 1 5 10

<210> 609
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa is Lys, Arg, Thr, Gln, Gly, Ala, Trp, Met, Ile or Ser

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa is Val, Arg, Lys, Leu, Met or Ile

<220>

<221> misc_feature
 <222> (5)..(5)
 <223> Xaa is His, Thr, Asn, Gln, Ala, Val, Tyr, Trp, Phe or Met

<400> 609

Xaa Tyr Xaa Met Xaa
 1 5

<210> 610
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> Xaa is Phe or Ile

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> Xaa is Ser or Thr

<400> 610

Ser Ile Tyr Pro Ser Gly Gly Xaa Thr Phe Tyr Ala Asp Xaa Val Lys
 1 5 10 15

Gly

<210> 611
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (10)..(10)
 <223> Xaa is Glu or Asp

<400> 611

Ile Lys Leu Gly Thr Val Thr Thr Val Xaa Tyr
 1 5 10

<210> 612
 <211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 612

Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser
1 5 10

<210> 613

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 613

Asp Val Ser Asn Arg Pro Ser
1 5

<210> 614

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 614

Ser Ser Tyr Thr Ser Ser Ser Thr Arg Val
1 5 10

<210> 615

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 615

Ser Tyr Ile Met Met
1 5

<210> 616

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 616

Ser Gly Gln
1

<210> 617

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 617

Ser Ile Tyr Pro Ser Gly Gly Ile Thr Phe Tyr Ala Asp Thr Val Lys
1 5 10 15

Gly

<210> 618

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 618

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

<210> 619

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 619

Met Tyr Met Met Met
1 5

<210> 620

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 620

Ser Ile Tyr Pro Ser Gly Gly Ile Thr Phe Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

<210> 621

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 621

Thr Gly Thr Ser Ser Asp Val Gly Ala Tyr Asn Tyr Val Ser
 1 5 10

<210> 622

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(1)

<223> Xaa is Arg, Ser or Lys

<220>

<221> misc_feature

<222> (2)..(2)

<223> Xaa is Ala or Ser

<220>

<221> misc_feature

<222> (4)..(4)

<223> Xaa is Arg, Asn, Asp, Gln, Glu, His, Lys, Met or Ser

<220>

<221> misc_feature

<222> (5)..(10)

<223> May be absent

<220>

<221> misc_feature

<222> (11)..(11)

<223> Xaa is Asn, Asp or Absent

<220>

<221> misc_feature

<222> (12)..(12)

<223> Xaa is Ala, Gln, Glu, Leu, Lys, Met, Pro, Ser, Thr, Tyr or Val

<220>

<221> misc_feature

<222> (13)..(13)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (14)..(14)

<223> Xaa is Arg, Asn, Ser or Thr

<220>

<221> misc_feature

<222> (15)..(15)

<223> Xaa is Ala, Arg, Asn, Cys, Gln, Glu, His, Ile, Leu, Lys, Met, Phe, Ser, Thr, Tyr or Val

<220>

<221> misc_feature

<222> (16)..(16)

<223> Xaa is Ile, Leu, Met or Val

<220>

<221> misc_feature

<222> (17)..(17)

<223> Xaa is Ala, Arg, Asn, Gln, Glu, His, Ile, Lys, Met, Phe, Ser, Thr or Tyr

<400> 622

Xaa Xaa Ser Xaa Ser Leu Leu Tyr Ser Ser Xaa Xaa Xaa Xaa Xaa Xaa

1 5 10 15

Xaa

<210> 623

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(1)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (2)..(2)

<223> Xaa is Ala, Cys, Gly, Ser, Thr or Val

<220>

<221> misc_feature

<222> (3)..(3)

<223> Xaa is Ala, Cys, His, Ile, Leu, Met, Phe, Ser, Thr, Tyr or Val

<220>

<221> misc_feature

<222> (4)..(4)

<223> Xaa is Arg, Asn, Asp, Gln, Glu, Lys, Ser or Thr

<220>

<221> misc_feature

<222> (5)..(5)

<223> Xaa is Ala, Arg, Asn, Asp, Gln, Glu, Gly, His, Lys, Met, Phe, Pro, Ser, Thr or Tyr

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa is Ala, Asn, Ser or Thr

<400> 623

Xaa Xaa Xaa Xaa Xaa Xaa

1 5

<210> 624

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(1)

<223> Xaa is Arg, Asn, Gln, Glu or His

<220>

<221> misc_feature

<222> (3)..(3)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (4)..(4)

<223> Xaa is Ala, Arg, Asn, Cys, Gln, Glu, His, Ile, Leu, Lys, Met, Phe, Ser, Thr, Tyr or Val

<220>

<221> misc_feature

<222> (5)..(5)

<223> Xaa is Asn, Gly or Ser

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Arg, Ser, Thr, Trp, Tyr or Val

<220>

<221> misc_feature
 <222> (8)..(8)
 <223> Xaa is Ala, Arg, Asn, Asp, Gln, Glu, Gly, His, Lys, Met, Pro,
 Ser, Thr or Tyr

<400> 624

Xaa Gln Xaa Xaa Xaa Xaa Pro Xaa Thr
 1 5

<210> 625
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> Xaa is Tyr or Phe

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa is Thr or Ser

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> Xaa is Ile, Leu, Met or Phe

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa is Ala, Arg, Asn, Asp, Cys, Gln, Glu, His, Ile, Leu, Lys,
 Met, Pro, Ser, Thr, Trp, Tyr or Val

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa is Asn, Asp, Gln, Glu, Lys, Pro, Ser or Thr

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> Xaa is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu,
 Lys, Met, Phe, Pro, Ser, Thr, Tyr or Val

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> Xaa is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu,
 Lys, Met, Phe, Pro, Ser, Thr, Tyr or Val

<220>
 <221> misc_feature
 <222> (9)..(9)

<223> Xaa is Ala, Arg, Cys, Gln, Glu, His, Ile, Leu, Lys, Met, Phe,
Ser, Thr, Trp, Tyr or Val

<400> 625

Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asn
1 5 10

<210> 626

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<220>

<221> misc_feature

<222> (1)..(1)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (2)..(2)

<223> Xaa is Ile, Leu, Met, Phe or Val

<220>

<221> misc_feature

<222> (3)..(3)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (4)..(4)

<223> May be absent

<220>

<221> misc_feature

<222> (5)..(5)

<223> Xaa is Ala, Arg, Asn, Gln, Glu, His, Lys, Met, Ser, Thr, Tyr or
Val

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Met,
Phe, Pro, Ser, Thr, Tyr or Val

<220>

<221> misc_feature

<222> (7)..(7)

<223> Xaa is Asn, Gly or Ser

<220>

<221> misc_feature

<222> (8)..(8)

<223> Xaa is Asn, Gly or Ser

<220>

<221> misc_feature
 <222> (10)..(10)
 <223> Xaa is Ala, Arg, Asn, Gln, Glu, His, Lys, Met, Ser, Thr or Tyr

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> Xaa is Ala, Arg, Asn, Cys, Gln, Glu, His, Ile, Leu, Lys, Met,
 Phe, Ser, Thr, Trp, Tyr or Val

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> Xaa is Ala, Asp, Gln, Glu, Lys, Pro, Ser or Thr

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> Xaa is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu,
 Lys, Met, Phe, Pro, Ser, Thr, Tyr or Val

<220>
 <221> misc_feature
 <222> (15)..(15)
 <223> Xaa is Ile, Leu, Met or Phe

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> Xaa is Ala, Gly or Ser

<400> 626

Xaa Xaa Xaa Pro Xaa Xaa Xaa Xaa Thr Xaa Xaa Asn Xaa Xaa Xaa Lys
 1 5 10 15

Xaa

<210> 627
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Xaa is Ala, Arg, Asn, Gln, Glu, His, Lys, Met, Ser, Thr or Tyr

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> Xaa is Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Met,
 Phe, Pro, Ser, Thr, Tyr or Val

<220>

<221> misc_feature

<222> (3)..(3)

<223> Xaa is Gln, Gly, His, Thr or Trp

<220>

<221> misc_feature

<222> (4)..(7)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (8)..(8)

<223> Xaa is Phe or Tyr

<220>

<221> misc_feature

<222> (9)..(10)

<223> May be absent

<400> 627

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Ile

1 5 10

<210> 628

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 628

Arg Ala Ser Ser Ser Val Ser Tyr Ile Tyr

1 5 10

<210> 629

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 629

Ala Thr Phe Asn Leu Ala Ser

1 5

<210> 630

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 630

His Gln Arg Ser Ser Tyr Pro Trp Thr
 1 5

<210> 631

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 631

Gly Tyr Thr Phe Pro Asp Tyr Tyr Met Asn
 1 5 10

<210> 632

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 632

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

Gly

<210> 633

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 633

Gly Ala Leu
 1

<210> 634

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 634

Ser Ala Ser Ser Ser Ile Arg Tyr Met His
 1 5 10

<210> 635

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 635

Asp Thr Ser Lys Leu Thr Ser
 1 5

<210> 636

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 636

Gln Gln Asp Ser Ser Tyr Pro Leu Thr
 1 5

<210> 637

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 637

Gly Tyr Thr Phe Thr Ser Tyr Asp Ile Asn
 1 5 10

<210> 638

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 638

Trp Ile Phe Pro Arg Asp Asn Asn Thr Lys Tyr Asn Glu Asn Phe Lys
 1 5 10 15

Gly

<210> 639

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 639

Glu Asn Trp Val Gly Asp Phe

1 5

<210> 640

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 640

Lys Ala Ser Gln Asp Val Gly Thr Ala Val Ala

1 5 10

<210> 641

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 641

Trp Ala Ser Thr Arg His Thr

1 5

<210> 642

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 642

Gln Gln Tyr Tyr Gly Tyr Pro Leu Thr

1 5

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 643

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 643

Gly Tyr Ser Ile Thr Ser Asp Tyr Trp Asn
1 5 10

<210> 644

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 644

Tyr Ile Ser Tyr Thr Gly Ser Thr Tyr Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 645

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 645

Tyr Gly Gly Trp Leu Ser Pro Phe
1 5

<210> 646

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 646

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

<210> 647

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 647

Gly Tyr Ser Ile Ile Ser Asp Tyr Trp Asn

1 5 10

<210> 648

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 648

Arg Gly Gly Trp Leu Leu Pro Phe

1 5

<210> 649

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 649

Gly Phe Ser Leu Thr Thr Tyr Ser Ile Asn

1 5 10

<210> 650

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 650

Val Met Trp Ala Gly Gly Gly Thr Asn Ser Asn Ser Val Leu Lys Ser

1 5 10 15

<210> 651

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 651

Tyr Tyr Gly Asn Ser Pro Tyr Tyr Ala Ile
 1 5 10

<210> 652
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 652

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

<210> 653
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 653

Glu Asp Asn Gln Arg Pro Ser
 1 5

<210> 654
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 654

Gln Ser Tyr Asp Ser Ser Thr Trp Val
 1 5

<210> 655
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 655

Trp Ile Ser Pro Ile Gly Gly Ser Thr Asn Tyr Ala Gln Lys Val Gln
 1 5 10 15

Gly

<210> 656
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<220>
 <221> misc_feature
 <222> (3)..(17)
 <223> Xaa can be any naturally occurring amino acid

<400> 656

Gly Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15

Xaa Asp Val

<210> 657
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 657

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

<210> 658
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 658

Gly Lys Asn Asn Arg Pro Ser
 1 5

<210> 659
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 659

Gln Ser Tyr Asp Ser Ser Asn Leu Trp Val
1 5 10

<210> 660

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 660

Ser Tyr Gly Ile Ser
1 5

<210> 661

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 661

Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu Glu
1 5 10 15

Asp

<210> 662

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 662

Ala Leu Pro Ser Gly Thr Ile Leu Val Gly Gly Trp Phe Asp Pro
1 5 10 15

<210> 663

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 663

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser
 1 5 10

<210> 664

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 664

Ser Asp Arg Asp Arg Pro Ser
 1 5

<210> 665

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 665

Asn Ser Arg Asp Ser Ser Gly Asn His Tyr Val
 1 5 10

<210> 666

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 666

Ser Tyr Ala Leu Ser
 1 5

<210> 667

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 667

Ala Ile Ser Gly Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
 1 5 10 15

Asp

<210> 668

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 668

Asp Val Phe Pro Glu Thr Phe Ser Met Asn Tyr Gly Met Asp Val

1 5 10 15

<210> 669

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 669

Gly Gly Ser Asp Ile Gly Arg Lys Ser Val His

1 5 10

<210> 670

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 670

Gln Val Trp Asp Asn Asn Ser Asp His Tyr Val

1 5 10

<210> 671

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 671

Asp Tyr Ala Met His

1 5

<210> 672
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 672

Leu Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
 1 5 10 15

Asp

<210> 673
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 673

Val Leu Leu Pro Cys Ser Ser Thr Ser Cys Tyr Gly Ser Val Gly Ala
 1 5 10 15

Phe Asp Ile

<210> 674
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 674

Ser Ser Tyr Thr Ser Ser Thr Leu Pro
 1 5

<210> 675
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 675

Asn Tyr Asp Met Ser
1 5

<210> 676
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 676

Arg Val Asn Trp Asn Gly Gly Ser Thr Thr Tyr Ala Asp Ala Val Lys
1 5 10 15

Asp

<210> 677
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 677

Glu Phe Val Gly Ala Tyr Asp Leu
1 5

<210> 678
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 678

Arg Ala Ser Gln Ser Ile Gly Asn Ser Leu Ala
1 5 10

<210> 679
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 679

Ala Ala Ser Thr Leu Gln Ser

1 5

<210> 680
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 680

Gln Gln His Thr Ile Pro Thr Phe Ser
 1 5

<210> 681
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 681

Gly Leu Tyr Ile His
 1 5

<210> 682
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 682

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

Asp

<210> 683
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 683

Gly Leu Arg Trp Gly Ile Trp Gly Trp Phe Asp Pro
 1 5 10

<210> 684

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 684

Arg Ala Ser Gln Gly Ile Gly Ser Tyr Leu Ala
 1 5 10

<210> 685

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 685

Gln Asp Ile Lys Arg Pro Ser
 1 5

<210> 686

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 686

Gln Gln Leu Asn Asn Tyr Pro Ile Thr
 1 5

<210> 687

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 687

Asp Asn Ala Ile Ser
 1 5

<210> 688

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 688

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

Asp

<210> 689

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 689

Thr Met Val Arg Gly Phe Leu Gly Val Met Asp Val
1 5 10

<210> 690

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 690

Ser Gly Asp Lys Leu Gly Asn Lys Tyr Ala Tyr
1 5 10

<210> 691

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 691

Glu Asp Tyr Arg Arg Pro Ser
1 5

<210> 692

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 692

Gln Thr Trp Asp Asn Ser Val Val

1 5

<210> 693

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 693

Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys

1 5 10 15

Asp

<210> 694

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 694

Asp Gln Phe Val Thr Ile Phe Gly Val Pro Arg Tyr Gly Met Asp Val

1 5 10 15

<210> 695

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 695

Thr Arg Ser Ser Gly Ser Ile Asp Ser Asn Tyr Val Gln

1 5 10

<210> 696

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 696

Asp Asp Ser Asp Arg Pro Ser

1 5

<210> 697

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 697

Gln Ser Tyr Asp Ser Asn Asn Arg His Val Ile

1 5 10

<210> 698

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 698

Thr Tyr Ala Leu Asn

1 5

<210> 699

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 699

Arg Ile Val Pro Leu Ile Gly Leu Val Asn Tyr Ala His Asn Phe Glu

1 5 10 15

Asp

<210> 700

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 700

Gly Arg Gln Met Phe Gly Ala Gly Ile Asp Phe
1 5 10

<210> 701

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 701

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

<210> 702

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 702

Glu Asp Asn Lys Arg Pro Ser
1 5

<210> 703

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 703

Gln Ser Tyr His Ser Ser Gly Trp Glu
1 5

<210> 704

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 704

Ser His Gly Ile Thr

1 5

<210> 705
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 705

Trp Ile Ser Ala His Asn Gly His Ala Ser Asn Ala Gln Lys Val Glu
 1 5 10 15

Asp

<210> 706
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 706

Glu Val Tyr Gly Gly Asn Ser Asp Tyr
 1 5

<210> 707
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 707

Gly Gly Asn Asn Ile Gly Ser Lys Gly Val His
 1 5 10

<210> 708
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 708

Tyr Lys Ser Asp Ser Asn Lys Gln Gln Ala Ser
 1 5 10

<210> 709
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 709

Gln Val Trp Asp Ser Ser Ser Asp His Trp Val
 1 5 10

<210> 710
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 710

Arg His Gly Met His
 1 5

<210> 711
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 711

Val Ile Ser His Asp Gly Ser Val Lys Tyr Tyr Ala Asp Ser Met Lys
 1 5 10 15

Asp

<210> 712
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 712

Val His Ala Ala Leu Tyr Tyr Gly Met Asp Val
 1 5 10

<210> 713
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 713

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

<210> 714
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 714

Gln Ser Tyr Asp Ser Thr Thr Pro Ser Val
 1 5 10

<210> 715
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 715

Trp Thr Ser Pro His Asn Gly Leu Thr Ala Phe Ala Gln Ile Leu Glu
 1 5 10 15

Asp

<210> 716
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 716

Gly Leu Ser Tyr Gln Val Ser Gly Trp Phe Asp Pro
 1 5 10

<210> 717

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 717

Thr Arg Ser Ser Gly Ser Ile Ala Ser His Tyr Val Gln

1 5 10

<210> 718

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 718

Gln Ser Tyr Asp Gly Ile Thr Val Ile

1 5

<210> 719

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 719

Arg Ile Ile Pro Ile Leu Gly Ile Ala Asn Tyr Ala Gln Lys Phe Glu

1 5 10 15

Asp

<210> 720

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 720

Val His Pro Val Phe Ser Tyr Ala Leu Asp Val

1 5 10

<210> 721

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 721

Thr Leu Arg Ser Gly Leu Asn Val Gly Ser Tyr Arg Ile Tyr
 1 5 10

<210> 722

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 722

Gln Ser Tyr Asp Ser Ser Asn Arg Trp Val
 1 5 10

<210> 723

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 723

Thr Tyr Ala Phe Ser
 1 5

<210> 724

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 724

Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Val Glu
 1 5 10 15

Asp

<210> 725

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 725

Asp Gly Tyr Gly Ser Asp Pro Val Leu

1 5

<210> 726

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 726

Met Ile Trp Tyr Ser Ser Ala Val Val

1 5

<210> 727

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 727

Asn Tyr Gly Ile Ser

1 5

<210> 728

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 728

Gly Asp Phe Arg Lys Pro Phe Asp Tyr

1 5

<210> 729

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 729

Arg Ala Thr Glu Ser Val Glu Tyr Tyr Gly Thr Ser Leu Val Gln
 1 5 10 15

<210> 730

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 730

Ala Ala Ser Ser Val Asp Ser
 1 5

<210> 731

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 731

Gln Gln Ser Arg Arg Val Pro Tyr Thr
 1 5

<210> 732

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 732

Ser Tyr Val Met His
 1 5

<210> 733

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 733

Tyr Val Asn Pro Phe Asn Asp Gly Thr Lys Tyr Asn Glu Met Phe Lys
 1 5 10 15

Gly

<210> 734

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 734

Gln Ala Trp Gly Tyr Pro

1 5

<210> 735

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 735

Glu Val Gln Leu Val 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 Asp Ser

20 25 30

Trp Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ala Trp Ile Ser Pro Tyr Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

50 55 60

Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr

65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ala Arg Arg His Trp Pro Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr

100 105 110

Leu Val Thr Val Ser Ser Ala Ser Thr Lys

115 120

<210> 736
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 736

Glu Val Gln Leu Val 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 Asp Ser
 20 25 30

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

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

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

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

Ala Arg Arg His Trp Pro Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 737
 <211> 447
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 737

Glu Val Gln Leu Val 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 Asp Ser
 20 25 30

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

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

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

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

Ala Arg Arg His Trp Pro Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu 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 Ala 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 Glu Glu Met 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
 435 440 445

<210> 738

<211> 214

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 738

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

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Tyr Ser Ala Ser Phe Leu Tyr 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 Gln Gln Tyr Leu Tyr His Pro Ala
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

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

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

Phe Asn Arg Gly Glu Cys
210

<210> 739

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 739

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Phe
20 25 30

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

Ala Asn Ile Asn Gln Asp Gly Thr Glu Lys Tyr Tyr Val Asp Ser Val
50 55 60

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

Leu Gln Met Asn Ser Leu Arg Ala Gly Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Thr Tyr Tyr Asp Phe Trp Ser Gly His Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 740

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 740

Gln Glu His Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Phe Ser Asn Phe
20 25 30

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

Ala Ala Leu Trp Ser Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Val 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
85 90 95

Ala Arg Gly Arg Gly Ala Pro Gly Ile Pro Ile Phe Gly Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 741
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 741

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala
20 25 30

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

Gly Arg Ile Lys Arg Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
50 55 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

Leu His Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
85 90 95

Tyr Cys Thr Thr Asp Asp Ile Val Val Val Pro Ala Val Met Arg Glu
100 105 110

Tyr Tyr Phe Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
115 120 125

Ser Ser
130

<210> 742
<211> 121
<212> PRT
<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 742

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

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

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

Gly Trp Ile Asn Pro Asn Ser Gly Thr Lys Lys Tyr Ala His Lys Phe
 50 55 60

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

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

Ala Arg Asp Glu Asp Trp Asn Phe Gly Ser Trp Phe Asp Ser Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 743

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 743

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

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

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

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ser Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Glu Asp Trp Asn Tyr Gly Ser Trp Phe Asp Thr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 744

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 744

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

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

Ser Gly Ile His Trp His Gly Lys Arg Thr Gly Tyr Ala Asp Ser Val
 50 55 60

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

Leu Gln Met Asn Ser Leu Lys Gly Glu Asp Thr Ala Leu Tyr His Cys
 85 90 95

Val Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro Trp Gly Gln
 100 105 110

Gly Thr Leu Val Ile Val Ser Ser
 115 120

<210> 745

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 745

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

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

Ser Gly Ile His Trp Ser Gly Arg Ser Thr Gly Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 746

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 746

Glu Val Gln Leu Val 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 Val Gly Ser Asn
20 25 30

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

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

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

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

Arg Gly Ile Arg Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser
 115

<210> 747

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 747

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

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

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

Ser Val Ile Ser Ser Gly Gly Asn Thr His Tyr Ala Asp Ser Val Lys
 50 55 60

Gly Arg Phe Ile Met Ser Arg Gln Thr Ser Lys Asn Thr Leu Tyr Leu
 65 70 75 80

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

Arg Gly Ile Arg Gly Leu Asp Val Trp Gly Gln Gly Thr Met Val Thr
 100 105 110

Val Ser Ser

115

<210> 748

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 748

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

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

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

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

Gln Asp Arg Val Ile Phe Thr Ala Asp Glu Ser Thr Thr Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Lys Ser Gly Asp Thr Ala Val Tyr Phe Cys
 85 90 95

Ala Arg Asn Trp Gly Leu Gly Ser Phe Tyr Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 749

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 749

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val His Pro Gly Arg
 1 5 10 15

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Ser Gly Ile Ser Trp Ser Asn Asn Asn Ile Gly Tyr Ala Asp Ser Val
50 55 60

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

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Phe Tyr Tyr Cys
85 90 95

Ala Lys Ser Gly Ile Phe Asp Ser Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 750

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 750

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

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

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

Ala Lys Asp Arg Thr Leu Tyr Gly Met Asp Val Trp Gly Gln Gly Thr
Page 334

100

105

110

Thr Val Thr Val Ser Ser
115

<210> 751

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 751

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

Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Asn
20 25 30

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

Trp Leu Ala Arg Ile Asp Trp Asp Gly Val Lys Tyr Tyr Asn Thr Ser
50 55 60

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

Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Phe Tyr
85 90 95

Cys Ala Arg Ser Thr Ser Leu Thr Phe Tyr Tyr Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 752

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 752

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Leu Arg Leu Ser Cys Ala Ala Ser Glu Phe Thr Val Gly Thr Asn
20 25 30

His Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Val Ile Tyr Ser Gly Gly Asn Thr Phe Tyr Ala Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg His Thr Ser Lys Asn Thr Leu Tyr Leu
65 70 75 80

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

Arg Gly Leu Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 753

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 753

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Arg Gly Glu
1 5 10 15

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

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

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

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

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Page 336

85 90 95

Ala Arg Asp Tyr Trp Gly Ser Gly Tyr Tyr Phe Asp Phe Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 754

<211> 130

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 754

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

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

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
50 55 60

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

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

Ala Arg Asp Asp Ile Val Val Val Pro Ala Pro Met Gly Tyr Tyr Tyr
100 105 110

Tyr Tyr Phe Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
115 120 125

Ser Ser
130

<210> 755

<211> 123

<212> PRT

<213> Artificial Sequence

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<220>

<223> chemically synthesized

<400> 755

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Phe
20 25 30

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

Ser Gly Ile Ser Trp Thr Gly Gly Asn Met Asp Tyr Ala Asn Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Glu Asp Ala Lys Asn Ser Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Ala Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Val Lys Asp Ile Arg Gly Ile Val Ala Thr Gly Gly Ala Phe Asp Ile
100 105 110

Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 756

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 756

Glu Val Gln Leu Val 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 Val Gly Thr Asn
20 25 30

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

Ser Val Ile Tyr Ser Gly Gly Ser Thr Phe Tyr Ala Asp Ser Val Lys

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

50 55

60

Gly Arg Phe Thr Ile Ser Arg Gln Thr Ser Gln Asn Thr Leu Tyr Leu
 65 70 75 80

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

Arg Gly Ile Arg Gly Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr
 100 105 110

Val Ser Ser
 115

<210> 757

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 757

Glu Val Gln Leu Val 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 Ile Ser Thr Asn
 20 25 30

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

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

Gly Arg Phe Thr Ile Ser Arg Leu Thr Ser Lys Asn Thr Val Tyr Leu
 65 70 75 80

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

Arg Gly Ile Arg Gly Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr
 100 105 110

Val Ser Ser
 115

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 758

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 758

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ile Asp Asp Ser
 20 25 30

Ala Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Gly Ile Ser Trp Lys Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
 50 55 60

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

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

Val Lys Asp Ile Arg Gly Asn Trp Asn Tyr Gly Gly Asn Trp Phe Asp
 100 105 110

Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 759

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 759

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

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Val Gly Val Asn
 20 25 30

His Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 Page 340

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

35

40

45

Ser Val Ile Phe Ser Ser Gly Arg Thr Phe Tyr Gly Asp Tyr Val Lys
 50 55 60

Gly Arg Leu Thr Ile Phe Arg Gln Thr Ser Gln Asn Thr Val Tyr Leu
 65 70 75 80

Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys Ala
 85 90 95

Arg Gly Ile Gly Gly Leu Asp Ile Trp Gly Arg Gly Thr Met Val Thr
 100 105 110

Val Ser Ser
 115

<210> 760

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 760

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

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

Ser Gly Ile Ser Trp Thr Gly Gly Thr Ile Asp Tyr Ala Asp Ser Val
 50 55 60

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

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

Thr Arg Asp Ile Arg Gly Asn Trp Lys Tyr Gly Gly Trp Phe Asp Pro
 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 761
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 761

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

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

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Asp Trp Met
 35 40 45

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Asn Thr Phe Tyr
 65 70 75 80

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

Ala Arg Glu Gly Ser Thr His His Asn Ser Phe Asp Pro Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 762
 <211> 114
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 762

Glu Val Gln Leu Val 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 Val Gly Thr Asn
 Page 342

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

20 25 30

Phe Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

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

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

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

Arg Gly Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
100 105 110

Ser Ser

<210> 763

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 763

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 Asn Thr Tyr
20 25 30

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

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

Gln Gly Arg Val Thr Phe Thr Thr Asp Glu Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Arg Thr Ser Gly Gly Phe Asp Pro Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 764

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 764

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

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

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

Gly Trp Ile Ser Pro Tyr Asn Gly Tyr Thr Asp Tyr Ala Gln Lys Leu
 50 55 60

Gln Gly Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Thr Thr Ala Tyr
 65 70 75 80

Met Glu Leu Arg Asn Leu Arg Ser Asp Asp Thr Ala Met Tyr Tyr Cys
 85 90 95

Ser Arg Gly Arg Gly Pro Tyr Trp Ser Phe Asp Leu Trp Gly Arg Gly
 100 105 110

Thr Leu Val Thr Val Ser Ser
 115

<210> 765

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 765

Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

1 5 10 15

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

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

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr His Ser Tyr Ser Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Glu Ile Lys
100 105

<210> 766

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 766

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

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

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

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Ala Ile Lys
 100 105

<210> 767
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 767

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

Asp Arg Val Thr Ile Thr Cys Arg Thr Ser Gln Gly Ile Arg Asn Asp
 20 25 30

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

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Asn Tyr Pro Tyr
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 768
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 768

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

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Thr Leu Val His Gly
 20 25 30

Asp Gly Asn Thr Tyr Leu Ser Trp Ile Gln Gln Arg Pro Gly Gln Pro
 Page 346

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

35

40

45

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

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

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

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

<210> 769

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 769

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

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Pro Ser Leu Val His Ser
 20 25 30

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

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

Asp Arg Phe Ser Gly Ser Gly Ala 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 Met Gln Ala
 85 90 95

Thr His Phe Pro Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Arg
 100 105 110

<210> 770

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 770

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

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

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

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asn Leu Gln Pro
 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
 85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 771

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 771

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

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

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

Tyr Val 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
 Page 348

65 70 75 80
 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
 85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 772
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 772

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

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

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

Tyr Ala 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 His Gln Ser Tyr Ser Thr Pro Pro
 85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 773
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 773

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

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

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

Phe Ala 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 Gln Gln Ser Tyr Ser Thr Pro Pro
 85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 774

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 774

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Phe Asn Phe Asn
 20 25 30

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

Ile Tyr Gly 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 Asn Arg Leu Glu
 65 70 75 80

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

Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

100

105

<210> 775

<211> 105

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 775

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

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

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

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Gly Gly Ser
 50 55 60

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

Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Cys Thr Pro Pro Ile Thr Phe
 85 90 95

Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 776

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 776

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

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

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

Tyr Ala 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 Gln Gln Ser Tyr Ser Thr Pro Pro
 85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 777

<211> 91

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 777

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Val Ile Ser Asn Tyr
 1 5 10 15

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Arg Leu Leu Ile
 20 25 30

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 35 40 45

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 50 55 60

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Arg
 65 70 75 80

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 85 90

<210> 778

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 778

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

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

Tyr Ala Ala Ser Ser Phe Gln Asn Ala 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 Gln Gln Ser Tyr Asn Thr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 779

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 779

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

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

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

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 780
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 780

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

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

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

Tyr Ala 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 Gln Gln Ser Tyr Ser Thr Pro Pro
 85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 781
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 781

Gln Ser Ile Ser Asn Trp
 1 5

<210> 782
 <211> 3
 <212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 782

Lys Ala Ser

1

<210> 783

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 783

Gln Gln Tyr His Ser Tyr Ser Tyr Thr

1

5

<210> 784

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 784

Gly Phe Thr Phe Ser Arg Phe Trp

1

5

<210> 785

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 785

Ile Asn Gln Asp Gly Thr Glu Lys

1

5

<210> 786

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 786

Ala Asn Thr Tyr Tyr Asp Phe Trp Ser Gly His Phe Asp Tyr
1 5 10

<210> 787

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 787

Gln Gly Ile Arg Asn Asp
1 5

<210> 788

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 788

Thr Ala Ser
1

<210> 789

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 789

Leu Gln His Asn Ser Tyr Pro Leu Thr
1 5

<210> 790

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 790

Gly Phe Thr Phe Ser Asn Phe Gly
1 5

<210> 791
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 791

Leu Trp Ser Asp Gly Ser Asn Lys
 1 5

<210> 792
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 792

Ala Arg Gly Arg Gly Ala Pro Gly Ile Pro Ile Phe Gly Tyr
 1 5 10

<210> 793
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 793

Ala Ala Ser
 1

<210> 794
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 794

Leu Gln His Asn Asn Tyr Pro Tyr Thr
 1 5

<210> 795
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 795

Gly Phe Thr Phe Ser Asn Ala Trp

1 5

<210> 796

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 796

Ile Lys Arg Lys Thr Asp Gly Gly Thr Thr

1 5 10

<210> 797

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 797

Thr Thr Asp Asp Ile Val Val Val Pro Ala Val Met Arg Glu Tyr Tyr

1 5 10 15

Phe Gly Met Asp Val

20

<210> 798

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 798

Gln Thr Leu Val His Gly Asp Gly Asn Thr Tyr

1 5 10

<210> 799

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 799

Lys Val Ser

1

<210> 800

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 800

Met Gln Ala Thr His Phe Pro Ile Thr

1

5

<210> 801

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 801

Gly Tyr Ser Phe Thr Gly Tyr Tyr

1

5

<210> 802

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 802

Ile Asn Pro Asn Ser Gly Thr Lys

1

5

<210> 803

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 803

Ala Arg Asp Glu Asp Trp Asn Phe Gly Ser Trp Phe Asp Ser
 1 5 10

<210> 804
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 804

Pro Ser Leu Val His Ser Asp Gly Asn Thr Tyr
 1 5 10

<210> 805
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 805

Lys Ile Ser
 1

<210> 806
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 806

Gly Tyr Thr Phe Thr Gly Tyr Tyr
 1 5

<210> 807
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 807

Leu Asn Pro Asn Thr Gly Thr Thr
 1 5

<210> 808

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 808

Ala Arg Asp Glu Asp Trp Asn Tyr Gly Ser Trp Phe Asp Thr
 1 5 10

<210> 809

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 809

Gln Ser Ile Asn Ser Tyr
 1 5

<210> 810

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 810

Val Ala Ser
 1

<210> 811

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 811

Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
 1 5 10

<210> 812

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 812

Gly Phe Thr Phe Asp Asp Tyr Gly
1 5

<210> 813

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 813

Ile His Trp His Gly Lys Arg Thr
1 5

<210> 814

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 814

Val Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro
1 5 10

<210> 815

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 815

Gln Ser Ile Ser Ser Tyr
1 5

<210> 816

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 816

Ile His Trp Ser Gly Arg Ser Thr

1 5

<210> 817
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 817

Ala Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro
 1 5 10

<210> 818
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 818

Gln Thr Ile Asn Ile Tyr
 1 5

<210> 819
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 819

His Gln Ser Tyr Ser Thr Pro Pro Ile Thr
 1 5 10

<210> 820
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 820

Gly Phe Thr Val Gly Ser Asn Tyr
 1 5

<210> 821
 <211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 821

Ile Tyr Ser Gly Gly Ser Thr

1 5

<210> 822

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 822

Ala Arg Gly Ile Arg Gly Leu Asp Val

1 5

<210> 823

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 823

Gln Ser Phe Asn Phe Asn Tyr

1 5

<210> 824

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 824

Gly Ala Ser

1

<210> 825

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 825

Gln Gln Tyr Glu Ser Ala Pro Trp Thr
 1 5

<210> 826

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 826

Gly Gly Ile Phe Ser Ser Ser Thr
 1 5

<210> 827

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 827

Ile Ile Pro Val Phe Gly Thr Val
 1 5

<210> 828

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 828

Ala Arg Asn Trp Gly Leu Gly Ser Phe Tyr Ile
 1 5 10

<210> 829

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 829

Gln Gln Ser Tyr Cys Thr Pro Pro Ile Thr
 1 5 10

<210> 830
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 830

Gly Phe Pro Phe Asp Glu Tyr Ala
 1 5

<210> 831
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 831

Ile Ser Trp Ser Asn Asn Asn Ile
 1 5

<210> 832
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 832

Ala Lys Ser Gly Ile Phe Asp Ser
 1 5

<210> 833
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 833

Gly Phe Thr Phe Ser Ser Tyr Gly
 1 5

<210> 834
 <211> 8
 <212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 834

Ile Ser Tyr Glu Gly Arg Asn Lys
1 5

<210> 835

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 835

Ala Lys Asp Arg Thr Leu Tyr Gly Met Asp Val
1 5 10

<210> 836

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 836

Gln Val Ile Ser Asn Tyr
1 5

<210> 837

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 837

Gln Lys Tyr Asn Ser Ala Pro Arg Thr
1 5

<210> 838

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 838

Gly Phe Ser Leu Ser Thr Asn Arg Met Cys
1 5 10

<210> 839

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 839

Ile Asp Trp Asp Gly Val Lys
1 5

<210> 840

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 840

Ala Arg Ser Thr Ser Leu Thr Phe Tyr Tyr Phe Asp Tyr
1 5 10

<210> 841

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 841

Gln Asn Ile Asn Asn Tyr
1 5

<210> 842

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 842

Gln Gln Ser Tyr Asn Thr Pro Leu Thr
1 5

<210> 843
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 843

Glu Phe Thr Val Gly Thr Asn His
 1 5

<210> 844
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 844

Ile Tyr Ser Gly Gly Asn Thr
 1 5

<210> 845
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 845

Ala Arg Gly Leu Gly Gly Met Asp Val
 1 5

<210> 846
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 846

Gln Thr Ile Ser Thr Tyr
 1 5

<210> 847
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 847

Leu Gln His Asn Ser Tyr Pro Tyr Thr

1 5

<210> 848

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 848

Gly Phe Thr Phe Ser Lys Tyr Trp

1 5

<210> 849

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 849

Ile Lys Gly Asp Gly Ser Glu Lys

1 5

<210> 850

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 850

Ala Arg Asp Tyr Trp Gly Ser Gly Tyr Tyr Phe Asp Phe

1 5 10

<210> 851

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 851

Val Val Ser
1

<210> 852
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 852

Gln Gln Ser Tyr Ser Thr Pro Phe Thr
1 5

<210> 853
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 853

Gly Phe Thr Phe Ser Ser Tyr Trp
1 5

<210> 854
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 854

Ile Lys Gln Asp Gly Ser Glu Lys
1 5

<210> 855
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 855

Ala Arg Asp Asp Ile Val Val Val Pro Ala Pro Met Gly Tyr Tyr Tyr
1 5 10 15

Tyr Tyr Phe Gly Met Asp Val
20

<210> 856
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 856

Gly Phe Thr Phe Asp Asp Phe Ala
1 5

<210> 857
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 857

Ile Ser Trp Thr Gly Gly Asn Met
1 5

<210> 858
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 858

Val Lys Asp Ile Arg Gly Ile Val Ala Thr Gly Gly Ala Phe Asp Ile
1 5 10 15

<210> 859
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 859

Gly Phe Thr Val Gly Thr Asn Tyr
1 5

<210> 860

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 860

Ala Arg Gly Ile Arg Gly Phe Asp Ile

1 5

<210> 861

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 861

Gly Phe Thr Ile Ser Thr Asn Tyr

1 5

<210> 862

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 862

Ile Tyr Ser Ser Gly Ser Thr

1 5

<210> 863

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 863

Gly Phe Thr Ile Asp Asp Ser Ala

1 5

<210> 864

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 864

Ile Ser Trp Lys Ser Gly Ser Ile
1 5

<210> 865

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 865

Val Lys Asp Ile Arg Gly Asn Trp Asn Tyr Gly Gly Asn Trp Phe Asp
1 5 10 15

Pro

<210> 866

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 866

Gly Phe Thr Val Gly Val Asn His
1 5

<210> 867

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 867

Ile Phe Ser Ser Gly Arg Thr
1 5

<210> 868

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 868

Ala Arg Gly Ile Gly Gly Leu Asp Ile
1 5

<210> 869

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 869

Gly Phe Thr Phe Asp Asp Tyr Ala
1 5

<210> 870

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 870

Ile Ser Trp Thr Gly Gly Thr Ile
1 5

<210> 871

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 871

Thr Arg Asp Ile Arg Gly Asn Trp Lys Tyr Gly Gly Trp Phe Asp Pro
1 5 10 15

<210> 872

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 872

Gly Tyr Thr Phe Thr Ala Tyr Tyr
1 5

<210> 873
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 873

Ile Ser Pro Asn Ser Gly Phe Thr
1 5

<210> 874
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 874

Ala Arg Glu Gly Ser Thr His His Asn Ser Phe Asp Pro
1 5 10

<210> 875
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 875

Gly Phe Thr Val Gly Thr Asn Phe
1 5

<210> 876
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 876

Ile Ile Pro Ile Leu Gly Ala Ala
1 5

<210> 877
<211> 8
<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 877

Ala Arg Gly Gly Gly Met Asp Val
1 5

<210> 878

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 878

Gly Gly Thr Phe Asn Thr Tyr Val
1 5

<210> 879

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 879

Ile Ser Pro Tyr Asn Gly Tyr Thr
1 5

<210> 880

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 880

Ala Arg Asp Arg Thr Ser Gly Gly Phe Asp Pro
1 5 10

<210> 881

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 881

Gly Tyr Ile Phe Thr His Tyr Gly
1 5

<210> 882

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 882

Ser Arg Gly Arg Gly Pro Tyr Trp Ser Phe Asp Leu
1 5 10

<210> 883

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 883

Leu Ser Gly Arg Ser Gly Asn His
1 5

<210> 884

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 884

Ser Gly Arg Ser Ala Asn Pro Arg Gly
1 5

<210> 885

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 885

Leu Ser Gly Arg Ser Asp Asp His
1 5

<210> 886
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 886

Leu Ser Gly Arg Ser Asp Ile His
 1 5

<210> 887
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 887

Leu Ser Gly Arg Ser Asp Gln His
 1 5

<210> 888
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 888

Leu Ser Gly Arg Ser Asp Thr His
 1 5

<210> 889
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 889

Leu Ser Gly Arg Ser Asp Tyr His
 1 5

<210> 890
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 890

Leu Ser Gly Arg Ser Asp Asn Pro
1 5

<210> 891

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 891

Leu Ser Gly Arg Ser Ala Asn Pro
1 5

<210> 892

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 892

Leu Ser Gly Arg Ser Ala Asn Ile
1 5

<210> 893

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 893

Leu Ser Gly Arg Ser Asp Asn Ile
1 5

<210> 894

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 894

Met Ile Ala Pro Val Ala Tyr Arg
1 5

<210> 895

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 895

Arg Pro Ser Pro Met Trp Ala Tyr
1 5

<210> 896

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 896

Trp Ala Thr Pro Arg Pro Met Arg
1 5

<210> 897

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 897

Phe Arg Leu Leu Asp Trp Gln Trp
1 5

<210> 898

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 898

Ile Ser Ser Gly Leu
1 5

<210> 899

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 899

Ile Ser Ser Gly Leu Leu Ser
 1 5

<210> 900

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 900

Ile Ser Ser Gly Leu Leu
 1 5

<210> 901

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 901

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Pro Arg Gly
 1 5 10 15

<210> 902

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 902

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

Arg Gly

<210> 903

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

<220>
 <223> chemically synthesized

<400> 903

Ala Val Gly Leu Leu Ala Pro Pro Ser Gly Arg Ser Ala Asn Pro Arg
 1 5 10 15

Gly

<210> 904
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 904

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asp His
 1 5 10

<210> 905
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 905

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Ile His
 1 5 10

<210> 906
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 906

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Gln His
 1 5 10

<210> 907
 <211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 907

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Thr His

1 5 10

<210> 908

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 908

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Tyr His

1 5 10

<210> 909

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 909

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Pro

1 5 10

<210> 910

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 910

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Pro

1 5 10

<210> 911

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 911

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Ile
 1 5 10

<210> 912

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 912

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

Asp His

<210> 913

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 913

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

Ile His

<210> 914

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 914

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

Gln His

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 915

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 915

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

Thr His

<210> 916

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 916

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

Tyr His

<210> 917

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 917

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

Asn Pro

<210> 918

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 918

Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Ala
1 5 10 15

Asn Pro

<210> 919

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 919

Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Leu Ser Gly Arg Ser Ala
1 5 10 15

Asn Ile

<210> 920

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 920

Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Ile
1 5 10

<210> 921

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 921

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

Asn Ile

<210> 922

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 922

Gly Gly Ser Gly Gly Ser

1 5

<210> 923

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 923

Gln Gly Gln Ser Gly Ser

1 5

<210> 924

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 924

Gln Gly Gln Ser Gly Gln Gly

1 5

<210> 925

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 925

Gln Ser Gly Gln Gly

1 5

<210> 926

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 926

Ser Gly Gln Gly

1

<210> 927

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 927

Gly Gln Gly

1

<210> 928

<211> 2

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 928

Gln Gly

1

<210> 929

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 929

caaggtcagt ctggatcc

18

<210> 930

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 930

tattgcgagg ttagtgagct gttgttctt ccttggtgca tgggtggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggcgac 180
agagtgacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
cagaagcccc gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
gtgccagca gattttccgg cagcggctct ggcaccgact tcaccctgac catcagctcc 360
ctgcagcccc aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc 420
tttgcgagg gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 931

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 931

Tyr Cys Glu Val Ser Glu Leu Phe Val Leu Pro Trp Cys Met Gly Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 932
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 932
tcttgcccta tgcattccga ttatgctcat gattattgct atgttgagg tggctcgagc 60
ggtggcagcg gtggctctgg tggtagtagc acctctggc gtccgctaa cccacgtggc 120
ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagc 180
agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 933
<211> 151
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 933

Ser Cys Leu Met His Pro His Tyr Ala His Asp Tyr Cys Tyr Val Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 934
 <211> 516
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 934
 ttgtgcgagg tttgatgtt gttgcagcat ccgtggtgca tggggggagg tggctcgagc 60
 ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120
 ggcggttctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180
 agagtaccca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
 ttggcgagag gtaccaaggt ggaaatcaag cgttgtgagg ccactcacia gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 935
 <211> 151
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 935

Leu Cys Glu Val Leu Met Leu Leu Gln His Pro Trp Cys Met Gly Gly
 Page 392

1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 936

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 936

attgcgtgcc ggcattttat ggagcagttg ccgttttgcc atcatggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagac 180

agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

ttggcggag gtaccaaggt ggaaatcaag cgtgtgagg ccactcaca gacatcaact 480

tcacccattg tcaagagctt caacaggaat gagtgt 516

<210> 937

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 937

Ile Ala Cys Arg His Phe Met Glu Gln Leu Pro Phe Cys His His Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 938

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 938

```

tttggtccta ggtgcggtga ggcttctact tgcgttccgt atgagggagg tggctcgagc    60
ggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc    120
ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagcag    180
agagtaccca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag    240
cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc    300
gtgccagca gatttcccg cagcggctct ggcaccgact tcaccctgac catcagctcc    360
ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc    420
tttggcggag gtaccaaggt ggaaatcaag cgtgtgagg ccactcaca gacatcaact    480
tcaccattg tcaagagctt caacaggaat gagtgt                                516

```

<210> 939

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 939

```

Phe Gly Pro Arg Cys Gly Glu Ala Ser Thr Cys Val Pro Tyr Glu Gly
1       5       10      15

```

```

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20      25      30

```

```

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

```

```

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

```

```

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65      70      75      80

```

```

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85      90      95

```

```

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100     105     110

```

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 940
 <211> 516
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 940
 attctttatt gcgatagttg gggggcgggg tgcttgacgc ggccgggagg tggctcgagc 60
 ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120
 ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180
 agagtgacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
 ttggcgagg gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gattgt 516

<210> 941
 <211> 151
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 941

Ile Leu Tyr Cys Asp Ser Trp Gly Ala Gly Cys Leu Thr Arg Pro Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 942

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 942

gggattgcgt tgtgcccgtc tcattttgc cagctgcctc agactggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagac 180

agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480

tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 943

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 943

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 944

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 944

gatgggccgc gttgctttgt gtcgggggag tgctctccga ttggtggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc 120

ggcgggttctg acatccagat gaccagagc cccagagacc tgtctgctag cgtgggagc 180

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

agagtgcacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc 420
 ttggcgagg gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 945

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 945

Asp Gly Pro Arg Cys Phe Val Ser Gly Glu Cys Ser Pro Ile Gly Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 946
 <211> 516
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 946
 ttgtgctata agctggatta tgatgatagg tcttattgcc atattggagg tggctcgagc 60
 ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120
 ggcgggtctg acatccagat gacccagagc cccagcagcc tgtctgctag cgtgggagc 180
 agagtgacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc 420
 ttggcggag gtaccaaggt ggaaatcaag cgtgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 947
 <211> 151
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 947

Leu Cys Tyr Lys Leu Asp Tyr Asp Asp Arg Ser Tyr Cys His Ile Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 Page 400

85

90

95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 948

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 948

ccgtgccatc cgcacacctta tgatgctcgt ccttattgca atgtgggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180

agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480

tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 949

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 949

Pro Cys His Pro His Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
 1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 950

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 950

ccttgctatt ggcatccttt tttgcgtat aggtattgca atactggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagc 180

agagtaccca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcacia gacatcaact 480

tcacccattg tcaagagctt caacaggaat gagtgt 516

<210> 951

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 951

Pro Cys Tyr Trp His Pro Phe Phe Ala Tyr Arg Tyr Cys Asn Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 952

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<400> 952

gtttgctatt atatggattg gttggggcgg aattggtgct cttcgggagg tggctcgagc 60

gggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagc 180

agagtgacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcacia gacatcaact 480

tcacccattg tcaagagctt caacaggaat gagtgt 516

<210> 953

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 953

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 954

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 954

ctgtgcgac tggttaagtt gcgtgagttt ccttattgca tggggggagg tggctcgagc 60

gggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc 120

ggcgggttctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180

agagtgcacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480

tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 955

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 955

Leu Cys Asp Leu Phe Lys Leu Arg Glu Phe Pro Tyr Cys Met Gly Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 956
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 956
tatcttccgt gccatttgt tccgattggg gcttgaata ataagggagg tggctcgagc 60

gggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gacccagagc cccagcagcc tgtctgctag cgtgggagcag 180

agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc 420

ttggcgggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480

tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 957
<211> 151
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 957

Tyr Leu Pro Cys His Phe Val Pro Ile Gly Ala Cys Asn Asn Lys Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 958

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 958

atatttggcc atatgggtgt tgtggttcct cagtgcgcga attatggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180

agagtgacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

gtgccagca gattttccgg cagcggctct ggcaccgact tcaccctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc 420
 ttggcggag gtaccaaggt ggaaatcaag cgtgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 959
 <211> 151
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> chemically synthesized
 <400> 959

Ile Phe Cys His Met Gly Val Val Val Pro Gln Cys Ala Asn Tyr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 960

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 960

gcgtgccatc cgcacacctta tgatgctcgt ccttattgca atgtgggagg tggctcgagc 60

gggtgcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagc 180

agagtaccca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480

tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 961

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 961

Ala Cys His Pro His Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
1 5 10 15Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
35 40 45Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
50 55 60Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 962
 <211> 516
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 962
 ccgtgccatc cggctcctta tgatgctcgt ccttattgca atgtgggagg tggctcgagc 60
 ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120
 ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagc 180
 agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
 ttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 963
 <211> 151
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 963

Pro Cys His Pro Ala Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 964
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 964
ccgtgccatc cgcattgcta tgatgctcgt ccttattgca atgtgggagg tggctcgagc 60
ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120
ggcgggttctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180
agagtaccca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
ttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
tcaccattg tcaagagctt caacaggaat gagtgt 516

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 965

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 965

Pro Cys His Pro His Ala Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

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

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

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

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 966

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 966

ccgtgccatc cgcacacctg tgatgctcgt ccttattgca atgtgggagg tggctcgagc 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

ggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc 120
 ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagc 180
 agagtaccca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccc gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccc aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc 420
 ttggcggag gtaccaaggt ggaaatcaag cgtgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 967

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 967

Pro Cys His Pro His Pro Ala Asp Ala Arg Pro Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

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

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 50 55 60

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Thr
 100 105 110

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 115 120 125

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 968
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 968
ccgtgccatc cgcattccta tgctgctcgt ccttattgca atgtgggagg tggctcgagc 60
ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120
ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180
agagtgacca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
gtgccagca gatttccgg cagcggctct ggcaccgact tcaccctgac catcagctcc 360
ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 969
<211> 151
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 969

Pro Cys His Pro His Pro Tyr Ala Ala Arg Pro Tyr Cys Asn Val Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30

Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
35 40 45

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
50 55 60

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
Page 414

65 70 75 80
 Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95
 Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110
 Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 115 120 125
 Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140
 Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 970
 <211> 516
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 970
 ccgtgccatc cgcaccta tgatgctgct cctattgca atgtgggagg tggctcgagc 60
 ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120
 ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgtag cgtgggagc 180
 agagtaccca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
 ttggcgagg gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 971
 <211> 151
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 971

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Cys His Pro His Pro Tyr Asp Ala Ala Pro Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
 35 40 45

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 50 55 60

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 115 120 125

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 972

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 972

ccgtgccatc cgcataccta tgatgctcgt cctgcttgca atgtgggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagac 180

agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcacia gacatcaact 480

tcacccattg tcaagagctt caacaggaat gagtgt 516

<210> 973

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 973

Pro Cys His Pro His Pro Tyr Asp Ala Arg Pro Ala Cys Asn Val Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20 25 30

Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
35 40 45

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
50 55 60

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100 105 110

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
115 120 125

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
130 135 140

Thr Lys Val Glu Ile Lys Arg
145 150

<210> 974

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 974

```

ccgtgccatc cgcataccta tgatgctcgt ccttattgcg ctgtgggagg tggctcgagc    60
ggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc    120
ggcgggttctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagcag    180
agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag    240
cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc    300
gtgcccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc    360
ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta ccccagcacc    420
tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact    480
tcaccattg tcaagagctt caacaggaat gagtgt                                516

```

<210> 975

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 975

```

Pro Cys His Pro His Pro Tyr Asp Ala Arg Pro Tyr Cys Ala Val Gly
1       5       10      15

```

```

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
20      25      30

```

```

Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
35      40      45

```

```

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
50      55      60

```

```

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
65      70      75      80

```

```

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
85      90      95

```

```

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
100     105     110

```

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 115 120 125

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 976
 <211> 516
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 976
 ccgtgccatg cgcacacctta tgatgctcgt ccttattgca atgtgggagg tggctcgagc 60
 ggtggcagcg gtggctctgg tggtagtagc acctctgggc gttccgctaa cccacgtggc 120
 ggcgggttctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180
 agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240
 cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300
 gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360
 ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420
 ttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480
 tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 977
 <211> 151
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 977

Pro Cys His Ala His Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
 35 40 45

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 50 55 60

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 115 120 125

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 978

<211> 516

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 978

ccgtgccatc cgcataccta tgatgctcgt gcttattgca atgtgggagg tggctcgagc 60

ggtggcagcg gtggctctgg tggtagtagc acctctggtc gttccgctaa cccacgtggc 120

ggcgggtctg acatccagat gaccagagc cccagcagcc tgtctgctag cgtgggagc 180

agagtgaaca tcacctgtag agccagccag agcatcagca gctacctgaa ctggtatcag 240

cagaagcccg gcaaggcccc caaactgctg atctacgccg ccagctctct gcagtctggc 300

gtgccagca gattttccgg cagcggctct ggcaccgact tcacctgac catcagctcc 360

ctgcagcccg aggacttcgc cacctactac tgccagcagg acaacggcta cccagcacc 420

tttggcggag gtaccaaggt ggaaatcaag cgttgtgagg ccactcaca gacatcaact 480

tcaccattg tcaagagctt caacaggaat gagtgt 516

<210> 979

<211> 151

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 979

Pro Cys His Pro His Pro Tyr Asp Ala Arg Ala Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Thr Ser Thr Ser
 20 25 30

Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
 35 40 45

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 50 55 60

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
 65 70 75 80

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 85 90 95

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
 100 105 110

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 115 120 125

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 130 135 140

Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 980

<211> 474

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 980

ggaggtggct cgagcgggtgg cagcgggtggc tctggtggta ttagcagtgg tctgttaagc 60

ggtcgtagcg ataactcatgg cggttctgac atccagatga ccagagccc cagcagcctg 120

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 180

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

tacctgaact ggtatcagca gaagcccgcc aaggcccca aactgctgat ctacgccgcc 240
 agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 300
 accctgacca tcagctcct gcagcccgag gacttcgcca cctactactg ccagcaggac 360
 aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 420
 actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 474

<210> 981

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 981

Leu Cys Glu Val Leu Met Leu Leu Gln His Pro Trp Cys Met Gly Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 982
 <211> 474
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 982
 ggaggtggct cgagcgggtg cagcgggtggc tctggtggta ttagcagtgg tctgttaagc 60
 ggtcgtagcg ataactatgg cggttctgac atccagatga cccagagccc cagcagcctg 120
 tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 180
 tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 240
 agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttgg caccgacttc 300
 accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 360
 aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 420
 actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 474

<210> 983
 <211> 152
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 983

Ile Leu Tyr Cys Asp Ser Trp Gly Ala Gly Cys Leu Thr Arg Pro Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 984

<211> 474

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 984

ggaggtggct cgagcgggtg cagcgggtggc tctggtggta ttagcagtgg tctgttaagc 60

ggtcgtagcg ataactcatg cggttctgac atccagatga cccagagccc cagcagcctg 120

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 180

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 240

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttgg caccgacttc 300

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 360

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 420

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 474

<210> 985

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 985

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met

35

40

45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 986

<211> 474

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 986

ggaggtggct cgagcggtag cagcggtagc tctggtggta ttagcagtag tctgttaagc 60

ggtcgtagcg ataactatgg cgggtctgac atccagatga cccagagccc cagcagcctg 120

tctgctagcg tgggagacag agtgaccatc acctgtagag ccagccagag catcagcagc 180

tacctgaact ggtatcagca gaagcccgcc aaggccccc aactgctgat ctacgccgcc 240

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 300

accctgacca tcagctccct gcagcccgag gacttcgcca cctactactg ccagcaggac 360

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 420

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 474

<210> 987

<211> 152

<212> PRT

<213> Artificial Sequence

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<220>

<223> chemically synthesized

<400> 987

Pro Cys His Pro His Pro Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 988

<211> 474

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 988

ggaggtggct cgagcgggtgg cagcgggtggc tctggtggta ttagcagtgg tctgttaagc 60

ggtcgtagcg ataatcatgg cggttctgac atccagatga ccagagccc cagcagcctg 120

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 180

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

tacctgaact ggtatcagca gaagcccggc aaggcccca aactgctgat ctacgccgcc 240

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 300

accctgacca tcagctccct gcagcccgag gacttcgcca cctactactg ccagcaggac 360

aacggctacc ccagcacctt tggcggaggt accaaggtgg aatcaagcg ttgtgaggcc 420

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 474

<210> 989

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 989

Tyr Leu Pro Cys His Phe Val Pro Ile Gly Ala Cys Asn Asn Lys Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 990

<211> 474

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 990

ggaggtggct cgagcgggtg cagcgggtggc tctggtggta ttagcagtgg tctgttaagc 60

ggtcgtagcg ataactatgg cggttctgac atccagatga cccagagccc cagcagcctg 120

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 180

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 240

agctctctgc agtctggcgt gccagcaga tttccggca gcggctctgg caccgacttc 300

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 360

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 420

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 474

<210> 991

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 991

Ile Phe Cys His Met Gly Val Val Val Pro Gln Cys Ala Asn Tyr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly

100

105

110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 992

<211> 474

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 992

ggaggtggct cgagcggtag cagcggtagc tctggtgga ttagcagtag tctgttaagc 60

ggtcgtagcg ataatcatgg cggttctgac atccagatga cccagagccc cagcagcctg 120

tctgctagcg tgggcgacag agtgaccatc acctgtagag ccagccagag catcagcagc 180

tacctgaact ggtatcagca gaagcccggc aaggccccca aactgctgat ctacgccgcc 240

agctctctgc agtctggcgt gccagcaga tttccggca gcggtcttg caccgacttc 300

accctgacca tcagctccct gcagcccag gacttcgcca cctactactg ccagcaggac 360

aacggctacc ccagcacctt tggcggaggt accaaggtgg aaatcaagcg ttgtgaggcc 420

actcacaaga catcaacttc acccattgtc aagagcttca acaggaatga gtgt 474

<210> 993

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 993

Pro Cys His Pro His Ala Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
 35 40 45

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 994

<211> 477

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 994

ggaggtggct cgagcgggtg cagcgggtgct gtgggtctcc tggctcccc gggcggcctg 60

tccggccgca gcgataatca tggcgggtct gacatccaga tgaccagag cccagcagc 120

ctgtctgcta gcgtgggcca cagagtgacc atcacctgta gagccagcca gagcatcagc 180

agctacctga actggtatca gcagaagccc ggcaaggccc ccaaactgct gatctacgcc 240

gccagctctc tgcagtctgg cgtgcccagc agattttccg gcagcggctc tggcaccgac 300

ttcacctga ccatcagctc cctgcagccc gaggacttcg ccacctacta ctgccagcag 360

gacaacggct accccagcac cttggcgga ggtaccaagg tggaaatcaa gcgttgtgag 420

gccactcaca agacatcaac ttcacccatt gtcaagagct tcaacaggaa tgagtgt 477

<210> 995

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 995

Leu Cys Glu Val Leu Met Leu Leu Gln His Pro Trp Cys Met Gly Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Ala Val Gly Leu Leu Ala Pro Pro
 20 25 30

Gly Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln
 35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
 65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
 85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
 130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 996

<211> 477

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 996

ggaggtggct cgagcgggtg cagcgggtgct gtgggtctcc tggctcccc gggcggcctg 60

tccggccgca gcgataatca tggcgggttct gacatccaga tgaccagag cccagcagc 120

ctgtctgcta gcgtgggcca cagagtgacc atcacctgta gagccagcca gagcatcagc 180

agctacctga actggtatca gcagaagccc ggcaaggccc ccaaactgct gatctacgcc 240

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

gccagctctc tgcagtctgg cgtgcccagc agattttccg gcagcggctc tggcaccgac 300
 ttcaccctga ccatcagctc cctgcagccc gaggacttcg ccacctacta ctgccagcag 360
 gacaacggct accccagcac ctttggcgga ggtaccaagg tggaaatcaa gcgttgcgaa 420
 gtcacccatc agggcctgag ctcgcccgct acaaagagct tcaacagggg agagtgt 477

<210> 997
 <211> 153
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> chemically synthesized

 <400> 997

Ile Leu Tyr Cys Asp Ser Trp Gly Ala Gly Cys Leu Thr Arg Pro Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Ala Val Gly Leu Leu Ala Pro Pro
 20 25 30

Gly Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln
 35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
 65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
 85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
 130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 998

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<211> 477

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 998

```

ggaggtggct cgagcgggtg cagcgggtgct gtgggtctcc tggctcccc gggcggcctg    60
tccggccgca gcgataatca tggcgggttct gacatccaga tgaccagag cccagcagc    120
ctgtctgcta gcgtagggcga cagagtgacc atcacctgta gagccagcca gagcatcagc    180
agctacctga actggtatca gcagaagccc ggcaaggccc ccaaactgct gatctacgcc    240
gccagctctc tgcagtctgg cgtgccccagc agattttccg gcagcggctc tggcaccgac    300
ttcacctga ccatcagctc cctgcagccc gaggacttcg ccacctacta ctgccagcag    360
gacaacggct accccagcac cttggcgga ggtaccaagg tggaatcaa gcgttgcgaa    420
gtcacccatc agggcctgag ctgcccgcgc acaaagagct tcaacagggg agagtgt    477

```

<210> 999

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 999

```

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1         5         10        15

```

```

Gly Gly Ser Ser Gly Gly Ser Gly Ala Val Gly Leu Leu Ala Pro Pro
20        25        30

```

```

Gly Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln
35        40        45

```

```

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
50        55        60

```

```

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
65        70        75        80

```

```

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
85        90        95

```

```

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
100       105       110

```

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
 130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1000
 <211> 477
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1000
 ggaggtggct cgagcgggtg cagcgggtgct gtgggtctcc tggctcccc gggcggcctg 60
 tccggccgca gcgataatca tggcgggttct gacatccaga tgaccagag cccagcagc 120
 ctgtctgcta gcgtgggcga cagagtgacc atcacctgta gagccagcca gagcatcagc 180
 agctacctga actggtatca gcagaagccc ggcaaggccc ccaaactgct gatctacgcc 240
 gccagctctc tgcatgtcgg cgtgcccagc agattttccg gcagcggctc tggcaccgac 300
 ttcacctga ccatcagctc cctgcagccc gaggacttcg ccacctacta ctgccagcag 360
 gacaacggct accccagcac ctttggcgga ggtaccaagg tggaaatcaa gcgttgcgaa 420
 gtcacccatc agggcctgag ctcgcccgtc acaaagagct tcaacagggg agagtgt 477

<210> 1001
 <211> 153
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1001

Tyr Leu Pro Cys His Phe Val Pro Ile Gly Ala Cys Asn Asn Lys Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Ala Val Gly Leu Leu Ala Pro Pro
 20 25 30

Gly Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln
 35 40 45

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
 65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
 85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
 130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1002

<211> 477

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1002

ggaggtggct cgagcgggtg cagcgggtgct gtgggtctcc tggctcccc gggcggcctg 60

tccggccgca gcgataatca tggcgggttct gacatccaga tgaccagag cccagcagc 120

ctgtctgcta gcgtgggcca cagagtgacc atcacctgta gagccagcca gagcatcagc 180

agctacctga actggtatca gcagaagccc ggcaaggccc ccaaactgct gatctacgcc 240

gccagctctc tgcaagtctg cgtgccccagc agattttccg gcagcggctc tggcaccgac 300

ttcacctga ccatcagctc cctgcagccc gaggactcg ccacctacta ctgccagcag 360

gacaacggct accccagcac cttggcgga ggtaccaagg tggaatcaa gcgttgtgag 420

gccactcaca agacatcaac ttcacccatt gtcaagagct tcaacaggaa tgagtgt 477

<210> 1003

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1003

Ile Phe Cys His Met Gly Val Val Val Pro Gln Cys Ala Asn Tyr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Ala Val Gly Leu Leu Ala Pro Pro
 20 25 30

Gly Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln
 35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
 65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
 85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
 130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1004

<211> 477

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1004

ggaggtggct cgagcgggtg cagcgggtgct gtgggtctcc tggctcccc gggcggcctg 60

tccggccgca gcgataatca tggcgggttct gacatccaga tgaccagag ccccagcagc 120

ctgtctgcta gcgtgggcga cagagtgacc atcacctgta gagccagcca gagcatcagc 180

agctacctga actggtatca gcagaagccc ggcaaggccc ccaaactgct gatctacgcc 240

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

gccagctctc tgcagtctgg cgtgcccagc agattttccg gcagcggctc tggcaccgac 300

ttcacctga ccatcagctc cctgcagccc gaggacttcg ccacctacta ctgccagcag 360

gacaacggct accccagcac ctttggcgga ggtaccaagg tggaaatcaa gcgttgtgag 420

gccactcaca agacatcaac ttcaccatt gtcaagagct tcaacaggaa tgagtgt 477

<210> 1005

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1005

Pro Cys His Pro His Ala Tyr Asp Ala Arg Pro Tyr Cys Asn Val Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Ala Val Gly Leu Leu Ala Pro Pro
20 25 30

Gly Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln
35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1006

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1006

cagggccagt ccggctca

18

<210> 1007

<211> 786

<212> DNA

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1007

tatctgccct gccacttcgt gccaatcggg gcctgtaaca ataagggcgg tggatctagt 60

ggtaggtcag gcgggtctgg cggcatttcc agtggactct tgcaggacg atccgataat 120

catggcgggt ccgacatcca gatgacacag agcccttctt ccctctccgc aagcgttggc 180

gacaggggtca ccattacctg tagggcttct cagagcatct caagctatct gaactggtac 240

cagcagaaac ctggaaaggc tccaaaactg ctgatttacg ctgcctccag tcttcagtca 300

ggcgctcccct ccagatttag cggatcaggt agtggaaactg atttaccct tacaatatct 360

tctctgcagc cagaggactt cgccacatac tattgtcagc aagacaatgg ttaccccagt 420

acatttggcg gagggacaaa ggtcgagatc aaaaggaccg tagcagcacc aagcgtcttt 480

atctccccc ccagtgcagc acagctgaag agcggaacag cttcagtggg gtgtctcctg 540

aataacttct atccacgcga ggcaaagggt cagtgggaagg tggacaatgc actgcagtct 600

ggtaattccc aagaaagtgt tactgagcag gattccaagg attcaactta ctctctgtct 660

agcaccctga ctcttctaa agcagattat gagaagcata aggtctacgc ttgcgaggtg 720

accaccagg ggcttctc tccagttacc aagtcattca accgggggtga gtgttgatga 780

gaattc

786

<210> 1008

<211> 258

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1008

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly

1

5

10

15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe
145 150 155 160

Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val
165 170 175

Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp
180 185 190

Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr
195 200 205

Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr
210 215 220

Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val
225 230 235 240

Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly
245 250 255

Glu Cys

<210> 1009
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1009

Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ala Val Gly Leu Leu
 1 5 10 15

Ala Pro Pro

<210> 1010
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1010

Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Val His Met Pro Leu
 1 5 10 15

Gly Phe Leu Gly Pro
 20

<210> 1011
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1011

Gln Ser Met Ser Ser Tyr
 1 5

<210> 1012
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1012

Gly Ile Thr Val Gly Thr Asn Tyr
 1 5

<210> 1013

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1013

Ile Ser Ser Gly Gly Asn Thr
 1 5

<210> 1014

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1014

Gln Ala Ser Glu Ser Val Tyr Ser Asn Asn Tyr Leu Ser
 1 5 10

<210> 1015

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1015

Leu Ala Ser Thr Leu Ala Ser
 1 5

<210> 1016

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1016

Ile Gly Gly Lys Ser Ser Ser Thr Asp Gly Asn Ala
 1 5 10

<210> 1017
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1017

Ser Asn Gly Leu Thr
1 5

<210> 1018
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1018

Thr Ile Asn Lys Asp Ala Ser Ala Tyr Tyr Ala Ser Trp Ala Lys Gly
1 5 10 15

<210> 1019
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1019

Ile Ala Phe Lys Thr Gly Thr Ser Ile
1 5

<210> 1020
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1020

Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly Ile Thr Tyr Leu Tyr
1 5 10 15

<210> 1021
<211> 7
<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1021

Gln Met Ser Asn Leu Ala Ser
1 5

<210> 1022

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1022

Ala Gln Asn Leu Glu Pro Pro Leu Thr
1 5

<210> 1023

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1023

Asp Tyr Tyr Thr His
1 5

<210> 1024

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1024

Trp Ile Asp Pro Glu Asn Gly Lys Thr Ala Tyr Ala Pro Lys Phe Gln
1 5 10 15

Gly

<210> 1025

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1025

Gly Gly Tyr Asp Val Tyr Phe Leu Asp Tyr
1 5 10

<210> 1026

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1026

Lys Ala Ser Gln Asp Val Gly Ile Val Val Ala
1 5 10

<210> 1027

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1027

Trp Ala Ser Ile Arg His Thr
1 5

<210> 1028

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1028

Gln Gln Tyr Ser Asn Tyr Pro Leu Tyr Thr
1 5 10

<210> 1029

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1029

Gly Phe Ser Leu Thr Ser Tyr Gly Val His
 1 5 10

<210> 1030

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1030

Val Ile Trp Ala Gly Gly Ser Thr Asn Tyr Asn Ser Ala Leu Met Ser
 1 5 10 15

<210> 1031

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1031

Ala Lys Pro Tyr Gly Asn Ser Ala Met Asp Tyr
 1 5 10

<210> 1032

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1032

Val Ile Trp Ala Gly Gly Ser Thr Asn Tyr Val Asp Ser Val Lys Gly
 1 5 10 15

<210> 1033

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1033

Ala Lys Pro Tyr Gly Thr Ser Ala Met Asp Tyr
 1 5 10

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 1034

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1034

Val Ile Trp Ala Gly Gly Ser Thr Asn Tyr Ala Asp Ser Val Lys Gly
1 5 10 15

<210> 1035

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1035

Ala Ser Gln Ser Val Ser Thr Ser Ser Ser Ser Phe Met His
1 5 10

<210> 1036

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1036

Tyr Ala Ser Asn Leu Glu Ser
1 5

<210> 1037

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1037

Gln His Ser Trp Glu Ile Pro Tyr Thr
1 5

<210> 1038

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1038

Ser Tyr Gly Met Ser

1 5

<210> 1039

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1039

Ser Ile Ser Ser Gly Gly Ser Thr Tyr Tyr Pro Asp Ser Val Lys Gly

1 5 10 15

<210> 1040

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1040

Gly Tyr Asp Ser Gly Phe Ala Tyr

1 5

<210> 1041

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1041

Arg Ala Ser Gln Ser Val Ser Thr Ser Ser Ser Ser Tyr Met His

1 5 10 15

<210> 1042

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1042

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Ile Ser Ser Gly Gly Thr Thr Tyr Tyr Pro Asp Ser Val Lys Gly
 1 5 10 15

<210> 1043

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1043

Lys Ala Ser Gln Ser Val Ser Asn Asp Val Ala
 1 5 10

<210> 1044

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1044

Tyr Ala Ala Asn Arg Tyr Thr
 1 5

<210> 1045

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1045

Gln Gln Asp Tyr Thr Ser Pro Tyr Thr
 1 5

<210> 1046

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1046

Thr Tyr Gly Val His
 1 5

<210> 1047

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1047

Val Ile Trp Arg Gly Val Thr Thr Asp Tyr Asn Ala Ala Phe Met Ala
1 5 10 15

Ser

<210> 1048

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1048

Leu Gly Phe Tyr Ala Met Asp Tyr
1 5

<210> 1049

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1049

Lys Ala Ser Gln Ser Val Ser Asn Asp Val Gly
1 5 10

<210> 1050

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1050

Tyr Ala Ser Asn Arg Tyr Ser
1 5

<210> 1051

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1051

Ser Tyr Gly Val His

1 5

<210> 1052

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1052

Val Ile Trp Ser Gly Gly Val Thr Asp Tyr Asn Ala Ala Phe Ile Ser

1 5 10 15

<210> 1053

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1053

Arg Ser Ser Gln Ile Ile Val His Ser Asn Ala Asn Thr Tyr Leu Glu

1 5 10 15

<210> 1054

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1054

Lys Val Ser Asn Arg Phe Ser

1 5

<210> 1055

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1055

Phe Gln Gly Ser His Val Pro Tyr Thr
1 5

<210> 1056

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1056

Thr Tyr Trp Met His
1 5

<210> 1057

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1057

Gln Ile Asn Pro Asp Ser Thr Thr Ile Asn Thr Ala Pro Ser Leu Lys
1 5 10 15

Asp

<210> 1058

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1058

Pro Gly Asp Tyr Gly Tyr Asp Phe Asp Cys
1 5 10

<210> 1059

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1059

Ser Ala Ser Ser Ser Val Ser Ser Ser Tyr Leu Tyr
 1 5 10

<210> 1060

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1060

Asn Thr Ser Asn Leu Ala Ser
 1 5

<210> 1061

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1061

His Gln Trp Arg Ser Tyr Pro Pro Thr
 1 5

<210> 1062

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1062

Ser Gly Tyr Trp Asn
 1 5

<210> 1063

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1063

Tyr Ile Ser Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu Lys Ser
 1 5 10 15

<210> 1064
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1064

Ser Leu Leu Trp Phe Ser Thr Gly Phe Ala Tyr
1 5 10

<210> 1065
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1065

Ser Ala Asn Ser Ser Val Ser Tyr Met His
1 5 10

<210> 1066
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1066

Asp Thr Ser Lys Leu Ala Ser
1 5

<210> 1067
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1067

Gln Gln Trp Ser Ser Asn Pro Trp Thr
1 5

<210> 1068
<211> 16
<212> PRT
<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1068

Tyr Ile Trp Ser Gly Gly Ile Thr Asp Tyr Asn Ala Ala Phe Lys Ser
 1 5 10 15

<210> 1069

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1069

Arg Ala Ser Gln Ser Val Ser Thr Ser Ser Tyr Ser Tyr Met His
 1 5 10 15

<210> 1070

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1070

Gln Asn Ser Trp Glu Ile Pro Tyr Thr
 1 5

<210> 1071

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1071

Ser Thr Gly Met Ser
 1 5

<210> 1072

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1072

Ser Ile Ser Ser Gly Gly Thr Thr Tyr Tyr Leu Gly Ser Val Gln Gly
1 5 10 15

<210> 1073

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1073

Gly Tyr Asp Ala Gly Phe Ala Tyr
1 5

<210> 1074

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1074

Lys Ser Ser Gln Ser Leu Leu Tyr Ser Ser Asn Gln Lys Asn Ser Leu
1 5 10 15

Ala

<210> 1075

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1075

Trp Ala Ser Asn Arg Glu Ser
1 5

<210> 1076

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1076

Gln Gln Tyr Tyr Ser Tyr Pro Leu Thr
 1 5

<210> 1077
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1077

Ser Gly Tyr Trp Thr
 1 5

<210> 1078
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1078

Tyr Ile Tyr Thr Gly Ser Thr Tyr Tyr Asn Pro Ser Leu Lys Ser
 1 5 10 15

<210> 1079
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1079

Gln Arg Asp Trp Leu Gly Phe Ala Tyr
 1 5

<210> 1080
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1080

Arg Ala Ser Gln Ser Val Ser Thr Ser Ser Tyr Ser Tyr Val His
 1 5 10 15

<210> 1081

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1081

Ser Ile Ser Ser Gly Gly Ser Ile Tyr Tyr Pro Asp Ser Val Lys Gly
 1 5 10 15

<210> 1082

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1082

Gly Tyr Asp Ala Gly Phe Ala Phe
 1 5

<210> 1083

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1083

Gly Phe Thr Phe Ser Met Tyr Met Met Met
 1 5 10

<210> 1084

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1084

Gly Phe Thr Phe Ser Ala Tyr Ala Met Ala
 1 5 10

<210> 1085

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1085

Gly Phe Thr Phe Ser Ala Tyr Arg Met Phe
1 5 10

<210> 1086

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1086

Gly Phe Thr Phe Ser Ala Tyr Leu Met Val
1 5 10

<210> 1087

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1087

Gly Phe Thr Phe Ser Ala Tyr Val Met Phe
1 5 10

<210> 1088

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1088

Gly Phe Thr Phe Ser Ala Tyr Val Met Ser
1 5 10

<210> 1089

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1089

Gly Phe Thr Phe Ser Gly Tyr Leu Met Val

1 5 10

<210> 1090
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1090

Gly Phe Thr Phe Ser Gly Tyr Gln Met Leu
 1 5 10

<210> 1091
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1091

Gly Phe Thr Phe Ser Gly Tyr Ser Met Phe
 1 5 10

<210> 1092
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1092

Gly Phe Thr Phe Ser Gly Tyr Trp Met Ala
 1 5 10

<210> 1093
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1093

Gly Phe Thr Phe Ser Gln Tyr Leu Met Tyr
 1 5 10

<210> 1094
 <211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1094

Gly Phe Thr Phe Ser Gln Tyr Val Met Phe

1 5 10

<210> 1095

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1095

Gly Phe Thr Phe Ser Gln Tyr Tyr Met Tyr

1 5 10

<210> 1096

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1096

Gly Phe Thr Phe Ser Ser Tyr Leu Met Ser

1 5 10

<210> 1097

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1097

Gly Phe Thr Phe Ser Ser Tyr Leu Met Thr

1 5 10

<210> 1098

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1098

Gly Phe Thr Phe Ser Ser Tyr Gln Met Val
1 5 10

<210> 1099

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1099

Gly Phe Thr Phe Ser Ser Tyr Ser Met Ala
1 5 10

<210> 1100

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1100

Gly Phe Thr Phe Ser Ser Tyr Val Met Phe
1 5 10

<210> 1101

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1101

Gly Phe Thr Phe Ser Ser Tyr Val Met Ser
1 5 10

<210> 1102

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1102

Gly Phe Thr Phe Ser Ser Tyr Val Met Tyr
1 5 10

<210> 1103
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1103

Gly Phe Thr Phe Ser Ser Tyr Tyr Met Phe
1 5 10

<210> 1104
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1104

Gly Phe Thr Phe Ser Ser Tyr Tyr Met Val
1 5 10

<210> 1105
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1105

Gly Phe Thr Phe Ser Tyr Tyr Ser Met Val
1 5 10

<210> 1106
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1106

Gly Phe Thr Phe Ser Trp Tyr Leu Met Ala
1 5 10

<210> 1107
<211> 10
<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1107

Gly Phe Thr Phe Ser Trp Tyr Gln Met Ser
1 5 10

<210> 1108

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1108

Gln Ser Leu Glu Glu Ser Gly Gly Arg Leu Val Lys Pro Asp Glu Thr
1 5 10 15

Leu Thr Ile Thr Cys Thr Val Ser Gly Ile Asp Leu Ser Ser Asn Gly
20 25 30

Leu Thr Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Ile Gly
35 40 45

Thr Ile Asn Lys Asp Ala Ser Ala Tyr Tyr Ala Ser Trp Ala Lys Gly
50 55 60

Arg Leu Thr Ile Ser Lys Pro Ser Ser Thr Lys Val Asp Leu Lys Ile
65 70 75 80

Thr Ser Pro Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Gly Arg Ile
85 90 95

Ala Phe Lys Thr Gly Thr Ser Ile Trp Gly Pro Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 1109

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1109

Ala Ile Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
 1 5 10 15

Gly Thr Val Thr Ile Asn Cys Gln Ala Ser Glu Ser Val Tyr Ser Asn
 20 25 30

Asn Tyr Leu Ser Trp Phe Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu
 35 40 45

Leu Ile Tyr Leu Ala Ser Thr Leu Ala Ser Gly Val Pro Ser Arg Phe
 50 55 60

Lys Gly Ser Gly Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val
 65 70 75 80

Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Ile Gly Gly Lys Ser Ser
 85 90 95

Ser Thr Asp Gly Asn Ala Phe Gly Gly Gly Thr Glu Val Val Val Arg
 100 105 110

<210> 1110

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1110

Gln Met 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 Gly Ile Ile Pro Ile Phe 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 Gly Asn Ile Val Ala Thr Ile Thr Pro Leu Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 1111
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1111

Gln Pro Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Ala Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Phe Ala Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ala Leu Asp Ile Thr Gly Leu Gln
65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Asp Leu
85 90 95

Arg Ala Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 1112
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1112

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

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 Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys 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 Glu Gly Thr Ile Tyr Asp Ser Ser Gly Tyr Ser Phe Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 1113

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1113

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
Page 466

85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 1114
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1114

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 1115
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1115

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 1116

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1116

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 Page 468

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 1117
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1117

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 1118
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1118

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 1119

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1119

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 Arg Tyr
 20 25 30

Gly Val His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Arg Leu Ile Pro Ile Val Ser Met Thr Asn Tyr Ala Gln Lys Phe
 Page 470

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

50 55

60

Gln Asp Arg Val Ser Ile Thr Thr Asp Lys Ser Thr Gly Thr Ala Tyr
 65 70 75 80

Met Glu Leu Arg Ser Leu Thr Ser Glu Asp Thr Ala Leu Tyr Tyr Cys
 85 90 95

Ala Ser Val Gly Gln Gln Leu Pro Trp Val Phe Phe Ala Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 1120

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1120

Gln Met Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 1121

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1121

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Trp Leu Asp Arg Asp Ile Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 1122

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1122

Gln Met 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 Tyr Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
Page 472

35

40

45

Gly Gly Ile Ile Pro Ser Phe 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 Gly Pro Ile Val Ala Thr Ile Thr Pro Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 1123

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1123

Gln Met 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 Tyr Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Gly Ile Ile Pro Ile Phe 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 Gly Pro Ile Val Ala Thr Ile Thr Pro Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 1124
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1124

Gln Met 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 Tyr Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Gly Ile Ile Pro Ser Phe 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 Gly Pro Ile Val Ala Thr Ile Thr Pro Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 1125
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1125

Gln Met 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
 Page 474

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

20

25

30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Gly Ile Ile Pro Ala Phe 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 Gly Pro Ile Val Ala Thr Ile Thr Pro Leu Asp Tyr Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 1126

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1126

Ser Tyr Glu Leu Met Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15

Thr Ala Thr Ile Ala Cys Gly Gly Glu Asn Ile Gly Arg Lys Thr Val
 20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
 35 40 45

Tyr Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
 85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 1127
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1127

Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Thr Thr Ser Ser Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro
 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Ser Thr Trp
 85 90 95

Thr Phe Gly Arg Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 1128
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1128

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Asn Asn Ser Asn Ile Ala Asn Asn
 20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 Page 476

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

35

40

45

Ile Tyr Asp Asn Asn Tyr Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Asp Ile Thr Gly Leu Gln
 65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Val Trp Asp Gly Ser Leu
 85 90 95

Thr Thr Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 1129

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1129

Leu Pro Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Thr Ser Asp Ile Gly Gly Tyr
 20 25 30

Asp Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45

Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
 85 90 95

Ser Thr His Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 1130

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1130

Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45

Met Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Ser Ser
 85 90 95

Thr Leu Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 1131

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1131

Gln Ala Gly Leu Thr Gln Pro Pro Ser Val Ser Glu Ala Pro Arg Gln
 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 20 25 30

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Lys Ala Pro Lys Leu Leu
 35 40 45

Ile Tyr Tyr Asp Asp Leu Leu Pro Ser Gly Val Ser Asp Arg Phe Ser
 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
 Page 478

65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu

 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu

 100 105 110

<210> 1132
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1132

Gln Ser Ala Leu Thr Gln Pro Arg Ser Val Ser Gly Ser Pro Gly Gln

1 5 10 15

Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr

 20 25 30

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu

 35 40 45

Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe

 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu

65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser

 85 90 95

Thr Thr His Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu

 100 105 110

<210> 1133
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1133

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln

1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 35 40 45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
 65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
 85 90 95

Ser Val Trp Val Phe Gly Gly Gly Thr Gln Leu Thr Val Leu
 100 105 110

<210> 1134

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1134

Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Arg Ala Pro Arg Leu
 35 40 45

Met Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Gly Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Gly
 85 90 95

Gly Thr Leu Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 Page 480

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

100

105

110

<210> 1135

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1135

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln

1

5

10

15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn

20

25

30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu

35

40

45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser

50

55

60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln

65

70

75

80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu

85

90

95

Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu

100

105

110

<210> 1136

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1136

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln

1

5

10

15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn

20

25

30

Tyr Val Ser Trp Tyr Gln Gln Val Pro Gly Thr Ala Pro Lys Leu Leu

35

40

45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Asn Ser Asp Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
85 90 95

Ser Ala Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 1137

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1137

Gln Ser Val Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu
85 90 95

Ser Ala Gly Ser Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 1138

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1138

Ser Tyr Glu Leu Met Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15

Thr Ala Thr Ile Ala Cys Gly Gly Glu Asn Ile Gly Arg Lys Thr Val
 20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
 35 40 45

Tyr Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Leu Val Trp Asp Ser Ser Ser Asp His
 85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 1139

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1139

Ser Tyr Glu Leu Met Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15

Thr Ala Thr Ile Ala Cys Gly Gly Glu Asn Ile Gly Arg Lys Thr Val
 20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
 35 40 45

Tyr Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
 85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 1140
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1140

Ser Tyr Glu Leu Met Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15

Thr Ala Thr Ile Ala Cys Gly Gly Glu Asn Ile Gly Arg Lys Thr Val
 20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
 35 40 45

Tyr Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
 50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
 65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
 85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 1141
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1141

Ser Tyr Glu Leu Met Gln Pro Pro Ser Val Ser Val Ala Pro Gly Lys
 1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Thr Ala Thr Ile Ala Cys Gly Gly Glu Asn Ile Gly Arg Lys Thr Val
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
35 40 45

Tyr Asp Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser
50 55 60

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Ser Ser Asp His
85 90 95

Arg Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 1142

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1142

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Val Lys Lys Ser Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Ser Ile Thr
20 25 30

Asn Tyr Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu
35 40 45

Trp Met Gly Gly Ile Leu Pro Ile Phe Gly Ala Ala Lys Tyr Ala Gln
50 55 60

Lys Phe Gln Asp Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr
65 70 75 80

Ala Tyr Leu Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Met Tyr
85 90 95

Tyr Cys Ala Arg Gly Lys Arg Trp Leu Gln Ser Asp Leu Gln Tyr Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 1143
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1143

Gln Pro Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Ser Ser Ser Asp Val Gly Ser Tyr
 20 25 30

Asp Leu Val Ser Trp Tyr Gln Gln Ser Pro Gly Lys Val Pro Lys Leu
 35 40 45

Leu Ile Tyr Glu Gly Val Lys Arg Pro Ser Gly Val Ser Asn Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Ala Gly Thr
 85 90 95

Arg Asn Phe Val Phe Gly Gly Gly Thr Gln Leu Thr Val Leu
 100 105 110

<210> 1144
 <211> 153
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1144

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln
35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1145

<211> 147

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1145

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Leu Ser Gly Arg
20 25 30

Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser
35 40 45

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
50 55 60

Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
100 105 110

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu
130 135 140

Ile Lys Arg
145

<210> 1146
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1146

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Leu Ser Gly Arg Ser Gly Asn His Gly Gly Ser Asp Ile Gln
35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
Page 488

115

120

125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
 130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1147

<211> 147

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1147

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Leu Ser Gly Arg
 20 25 30

Ser Gly Asn His Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser
 35 40 45

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
 50 55 60

Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
 65 70 75 80

Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly
 85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
 100 105 110

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
 115 120 125

Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu
 130 135 140

Ile Lys Arg
 145

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<210> 1148

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1148

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Ser Gly Gly Ser Asp Ile Gln
35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1149

<211> 147

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1149

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
Page 490

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Ser Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser
35 40 45

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
50 55 60

Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
100 105 110

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu
130 135 140

Ile Lys Arg
145

<210> 1150

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1150

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Gln Asn Gln Ala Leu Arg Met Ala Gly Gly Ser Asp Ile Gln
35 40 45

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1151

<211> 147

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1151

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Gln Asn Gln Ala
20 25 30

Leu Arg Met Ala Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser
35 40 45

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
50 55 60

Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly
85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
100 105 110

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu
130 135 140

Ile Lys Arg
145

<210> 1152

<211> 155

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1152

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Val His Met Pro Leu Gly Phe Leu Gly Pro Gly Gly Ser Asp
35 40 45

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
50 55 60

Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu
65 70 75 80

Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
85 90 95

Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
100 105 110

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
115 120 125

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr
130 135 140

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1153
 <211> 149
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1153

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Val His Met Pro
 20 25 30

Leu Gly Phe Leu Gly Pro Gly Gly Ser Asp Ile Gln Met Thr Gln Ser
 35 40 45

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
 50 55 60

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys
 65 70 75 80

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln
 85 90 95

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
 100 105 110

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
 115 120 125

Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys
 130 135 140

Val Glu Ile Lys Arg
 145

<210> 1154
 <211> 158
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1154

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Gly Asn His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1155

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1155

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Gly Asn His Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1156

<211> 160

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1156

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Pro Arg
 35 40 45

Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
 50 55 60

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser

65 70 75 80
 Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
 85 90 95
 Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
 100 105 110
 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
 115 120 125
 Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn
 130 135 140
 Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155 160

 <210> 1157
 <211> 154
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> chemically synthesized

 <400> 1157
 Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

 Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

 Leu Leu Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile
 35 40 45

 Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
 50 55 60

 Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
 65 70 75 80

 Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala
 85 90 95

 Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
 100 105 110

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
 115 120 125

Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe
 130 135 140

Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1158

<211> 163

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1158

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ala Val Gly Leu Leu Ala Pro Pro Thr Ser Gly Arg Ser Ala
 35 40 45

Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser
 50 55 60

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
 65 70 75 80

Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
 85 90 95

Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly
 100 105 110

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
 115 120 125

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
 130 135 140

Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu
 145 150 155 160

Ile Lys Arg

<210> 1159

<211> 157

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1159

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ala Val Gly Leu
 20 25 30

Leu Ala Pro Pro Thr Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly
 35 40 45

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
 50 55 60

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
 65 70 75 80

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
 85 90 95

Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
 100 105 110

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln
 115 120 125

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro
 130 135 140

Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1160

<211> 162

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1160

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ala Val Gly Leu Leu Ala Pro Pro Ser Gly Arg Ser Ala Asn
 35 40 45

Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
 50 55 60

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
 65 70 75 80

Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys
 85 90 95

Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val
 100 105 110

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 115 120 125

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
 130 135 140

Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile
 145 150 155 160

Lys Arg

<210> 1161

<211> 156

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1161

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ala Val Gly Leu
20 25 30

Leu Ala Pro Pro Ser Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser
35 40 45

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
50 55 60

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
65 70 75 80

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
85 90 95

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
100 105 110

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
115 120 125

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser
130 135 140

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1162

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1162

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asp His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1163

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1163

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asp His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
Page 502

100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1164

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1164

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Ile His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1165
 <211> 152
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1165

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Asp Ile His Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1166
 <211> 158
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1166

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Gln His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1167

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1167

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Leu Leu Ser Gly Arg Ser Asp Gln His Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1168

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1168

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Thr His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1169

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1169

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Thr His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1170

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1170

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Tyr His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1171

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1171

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Tyr His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1172

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1172

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Pro Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1173

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1173

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn Pro Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
Page 510

50 55

60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1174

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1174

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Pro Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1175

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1175

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Ala Asn Pro Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1176

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1176

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Ala Asn Ile Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1177

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1177

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Ala Asn Ile Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1178

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1178

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn Ile Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1179

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1179

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn Ile Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1180

<211> 167

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1180

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Thr Ser Thr Ser
35 40 45

Gly Arg Ser Ala Asn Pro Arg Gly Gly Gly Ser Asp Ile Gln Met Thr
50 55 60

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
65 70 75 80

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
85 90 95

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
100 105 110

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
Page 516

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

115

120

125

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 130 135 140

Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly
 145 150 155 160

Thr Lys Val Glu Ile Lys Arg
 165

<210> 1181

<211> 161

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1181

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ala Val Gly Leu
 20 25 30

Leu Ala Pro Pro Gly Gly Thr Ser Thr Ser Gly Arg Ser Ala Asn Pro
 35 40 45

Arg Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu
 50 55 60

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
 65 70 75 80

Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala
 85 90 95

Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro
 100 105 110

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 115 120 125

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp
 130 135 140

Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 145 150 155 160

Arg

<210> 1182

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1182

Gln Gly Gln Ser Gly Ser Ile Ala Cys Arg His Phe Met Glu Gln Leu
 1 5 10 15

Pro Phe Cys His His Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1183

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1183

Ile Ala Cys Arg His Phe Met Glu Gln Leu Pro Phe Cys His His Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1184

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1184

Gln Gly Gln Ser Gly Ser Pro Cys Tyr Trp His Pro Phe Phe Ala Tyr
1 5 10 15

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Arg Tyr Cys Asn Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1185

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1185

Pro Cys Tyr Trp His Pro Phe Phe Ala Tyr Arg Tyr Cys Asn Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1186

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1186

Gln Gly Gln Ser Gly Ser Val Cys Tyr Tyr Met Asp Trp Leu Gly Arg
1 5 10 15

Asn Trp Cys Ser Ser Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1187

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1187

Val Cys Tyr Tyr Met Asp Trp Leu Gly Arg Asn Trp Cys Ser Ser Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg

145 150

<210> 1188
 <211> 158
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1188

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Ala Asp Ala Arg
 1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
 35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
 50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
 85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
 100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
 115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
 130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150 155

<210> 1189
 <211> 152
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1189

Pro Cys His Pro His Pro Ala Asp Ala Arg Pro Tyr Cys Asn Val Gly
 1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
 20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
 35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
 65 70 75 80

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
 130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1190

<211> 158

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1190

Gln Gly Gln Ser Gly Ser Pro Cys His Pro His Pro Tyr Ala Ala Arg
 1 5 10 15

Pro Tyr Cys Asn Val Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ile Ser Ser Gly Leu Leu Ser Gly Arg Ser Asp Asn His Gly
 Page 524

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

35 40 45

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
50 55 60

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
65 70 75 80

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
85 90 95

Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
100 105 110

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
115 120 125

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr
130 135 140

Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
145 150 155

<210> 1191

<211> 152

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1191

Pro Cys His Pro His Pro Tyr Ala Ala Arg Pro Tyr Cys Asn Val Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ile Ser Ser Gly
20 25 30

Leu Leu Ser Gly Arg Ser Asp Asn His Gly Gly Ser Asp Ile Gln Met
35 40 45

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
50 55 60

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
65 70 75 80

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
85 90 95

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
100 105 110

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
115 120 125

Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly
130 135 140

Gly Thr Lys Val Glu Ile Lys Arg
145 150

<210> 1192
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1192

Gly Gln Ser Gly Ser
1 5

<210> 1193
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1193

Gln Ser Gly Ser
1

<210> 1194
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> chemically synthesized

<400> 1194

Ser Gly Ser
1

<210> 1195
 <211> 2
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1195

Gly Ser
 1

<210> 1196
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1196

Gln Gly Gln Ser Gly Gln
 1 5

<210> 1197
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1197

Gly Gln Ser Gly Gln
 1 5

<210> 1198
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chemically synthesized

<400> 1198

Gln Ser Gly Gln
 1

<210> 1199
 <211> 2
 <212> PRT
 <213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1199

Gly Gln

1

<210> 1200

<211> 153

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1200

Gln Gly Gln Ser Gly Ser Gly Ile Ala Leu Cys Pro Ser His Phe Cys
 1 5 10 15

Gln Leu Pro Gln Thr Gly Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser
 20 25 30

Gly Gly Ala Val Gly Leu Leu Ala Pro Pro Gly Gly Ser Asp Ile Gln
 35 40 45

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 50 55 60

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
 65 70 75 80

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
 85 90 95

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 100 105 110

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 115 120 125

Ala Thr Tyr Tyr Cys Gln Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly
 130 135 140

Gly Gly Thr Lys Val Glu Ile Lys Arg
 145 150

<210> 1201

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

<211> 147

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1201

Gly Ile Ala Leu Cys Pro Ser His Phe Cys Gln Leu Pro Gln Thr Gly
1 5 10 15

Gly Gly Ser Ser Gly Gly Ser Gly Gly Ser Gly Gly Ala Val Gly Leu
20 25 30

Leu Ala Pro Pro Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser
35 40 45

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
50 55 60

Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
65 70 75 80

Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly
85 90 95

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
100 105 110

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
115 120 125

Gln Asp Asn Gly Tyr Pro Ser Thr Phe Gly Gly Gly Thr Lys Val Glu
130 135 140

Ile Lys Arg
145

<210> 1202

<211> 445

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1202

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 Ser Tyr
 20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ser Ile Trp Arg Asn Gly Ile Val Thr Val 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
 85 90 95

Ala Lys Trp Ser Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110

Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
 115 120 125

Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu
 130 135 140

Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly
 145 150 155 160

Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser
 165 170 175

Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu
 180 185 190

Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr
 195 200 205

Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
 210 215 220

Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
 225 230 235 240

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
 245 250 255

CYTM_038_N02SG_Sub_Seq_List_01_07_2019_ST25

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
260 265 270

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275 280 285

Lys Pro Arg Glu Glu Gln Tyr Gln Ser Thr Tyr Arg Val Val Ser Val
290 295 300

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305 310 315 320

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
325 330 335

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
340 345 350

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
355 360 365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
370 375 380

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
385 390 395 400

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
405 410 415

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
420 425 430

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
435 440 445

<210> 1203

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> chemically synthesized

<400> 1203

Ser Ser Ala Gly Asn Asn Lys Asn Asn Lys Asn Asn Lys Asn Asn Lys
1 5 10 15

Phe Asp Tyr