

SEQUENCE LISTING

<110> THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE
SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES
TENEOBIO, INC.

<120> ANTI-B-CELL MATURATION ANTIGEN CHIMERIC ANTIGEN RECEPTORS WITH
HUMAN DOMAINS

<130> 739534

<150> US 62/527,556

<151> 2017-06-30

<160> 42

<170> PatentIn version 3.5

<210> 1

<211> 8

<212> PRT

<213> Homo sapiens

<400> 1

Gly Phe Thr Phe Thr Asn His Ala
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<211> 8

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Ile Ser Gly Asn Gly Arg Thr Thr
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Ala Lys Asp Gly Gly Glu Thr Leu Val Asp Ser
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Gly Phe Thr Phe Ser Ser His Ala
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Ile Ser Gly Ser Gly Asp Phe Thr
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Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly Tyr
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Gly Phe Thr Phe Ser Ser Tyr Ala
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Ile Ser Gly Ser Gly Asp Tyr Ile
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<210> 9

<211> 14

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Ala Lys Glu Gly Thr Gly Ala Asn Ser Ser Leu Ala Asp Tyr
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Gly Phe Thr Phe Ser Ser His Ala
1 5

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Ile Ser Gly Ser Gly Asp Tyr Thr
1 5

<210> 12

<211> 12

<212> PRT

<213> Homo sapiens

<400> 12

Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly His
1 5 10

<210> 13
 <211> 118
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 <213> Homo sapiens

<400> 13

Gln 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 Thr Asn His
 20 25 30

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

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

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

Leu Val Thr Val Ser Ser
 115

<210> 14
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 <212> PRT
 <213> Homo sapiens

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Gln 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 Ser His
 20 25 30

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

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

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

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

Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly Tyr Arg Gly Gln Gly
 100 105 110

Thr Leu Val Thr Val Ser Ser
 115

<210> 15
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<400> 15

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile 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 Glu Gly Thr Gly Ala Asn Ser Ser Leu Ala Asp Tyr Arg Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 16
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 <213> Homo sapiens

<400> 16

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

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

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

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

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

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

Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly His Arg Gly Gln Gly
 100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 17
<211> 375
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 17

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Thr Asn His Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Leu Val Ser Ser Ile Ser Gly Asn Gly Arg Thr Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Ser
85 90 95

Lys Asn Thr Leu Asp Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Gly Gly Glu Thr Leu Val Asp Ser
115 120 125

Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val Phe
130 135 140

Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
 145 150 155 160

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
 165 170 175

Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
 180 185 190

Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
 195 200 205

Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Ser
 210 215 220

Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro Arg
 225 230 235 240

Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro Arg
 245 250 255

Asp Phe Ala Ala Tyr Arg Ser Arg Val Lys Phe Ser Arg Ser Ala Asp
 260 265 270

Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
 275 280 285

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
 290 295 300

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
 305 310 315 320

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
 325 330 335

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
 340 345 350

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
 355 360 365

Met Gln Ala Leu Pro Pro Arg
 370 375

<210> 18
 <211> 376
 <212> PRT
 <213> Artificial Sequence

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 <223> Synthetic

<400> 18

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser His Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ala Ala Ile Ser Gly Ser Gly Asp Phe Thr His
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Val Ser Leu Gln Met Asn Asn Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly
 115 120 125

Tyr Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val
 130 135 140

Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 145 150 155 160

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
 165 170 175

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 180 185 190

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
 195 200 205

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg
 210 215 220

Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro
 225 230 235 240

Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro
 245 250 255

Arg Asp Phe Ala Ala Tyr Arg Ser Arg Val Lys Phe Ser Arg Ser Ala
 260 265 270

Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
 275 280 285

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
 290 295 300

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
 305 310 315 320

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
325 330 335

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
340 345 350

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
355 360 365

His Met Gln Ala Leu Pro Pro Arg
370 375

$\langle 210 \rangle$	19
$\langle 211 \rangle$	378
$\langle 212 \rangle$	PRT
$\langle 213 \rangle$	Artificial Sequence

<220>
<223> Synthetic

<400> 19

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Asp Tyr Ile Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Glu Gly Thr Gly Ala Asn Ser Ser Leu
 115 120 125

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

Pro Val Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro
 145 150 155 160

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
 165 170 175

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
 180 185 190

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
 195 200 205

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg
 210 215 220

Asn Arg Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met
 225 230 235 240

Thr Pro Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala
 245 250 255

Pro Pro Arg Asp Phe Ala Ala Tyr Arg Ser Arg Val Lys Phe Ser Arg
 260 265 270

Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn
 275 280 285

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
 290 295 300

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 305 310 315 320

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 325 330 335

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 340 345 350

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 355 360 365

Ala Leu His Met Gln Ala Leu Pro Pro Arg
 370 375

<210> 20
 <211> 376
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 20

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
 20 25 30

Ile Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser His Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Asp Tyr Thr His
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Ser
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly
115 120 125

His Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val
130 135 140

Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
145 150 155 160

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
165 170 175

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
180 185 190

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
195 200 205

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg
210 215 220

Ser Lys Arg Ser Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro
225 230 235 240

Arg Arg Pro Gly Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro
245 250 255

Arg Asp Phe Ala Ala Tyr Arg Ser Arg Val Lys Phe Ser Arg Ser Ala
260 265 270

Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
 275 280 285

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
 290 295 300

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
 305 310 315 320

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
 325 330 335

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
 340 345 350

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
 355 360 365

His Met Gln Ala Leu Pro Pro Arg
 370 375

<210> 21
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 <213> Artificial Sequence

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 <223> Synthetic

<400> 21

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Thr Asn His Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Leu Val Ser Ser Ile Ser Gly Asn Gly Arg Thr Thr Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Ser
 85 90 95

Lys Asn Thr Leu Asp Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Gly Gly Glu Thr Leu Val Asp Ser
 115 120 125

Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val Phe
 130 135 140

Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
 145 150 155 160

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
 165 170 175

Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
 180 185 190

Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
 195 200 205

Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Lys Arg
 210 215 220

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
 225 230 235 240

Val	Gln	Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu
				245					250					255	

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
260 265 270

Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
275 280 285

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
290 295 300

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
305 310 315 320

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
325 330 335

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
340 345 350

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
355 360 365

His Met Gln Ala Leu Pro Pro Arg
370 375

$\langle 210 \rangle$	22
$\langle 211 \rangle$	377
$\langle 212 \rangle$	PRT
$\langle 213 \rangle$	Artificial Sequence

<220>
<223> Synthetic

<400> 22

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser His Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ala Ala Ile Ser Gly Ser Gly Asp Phe Thr His
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Val Ser Leu Gln Met Asn Asn Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly
 115 120 125

Tyr Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val
 130 135 140

Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 145 150 155 160

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
 165 170 175

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 180 185 190

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
 195 200 205

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Lys
 210 215 220

Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg
 225 230 235 240

Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro
 245 250 255

Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser
 260 265 270

Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu
 275 280 285

Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg
 290 295 300

Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln
 305 310 315 320

Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr
 325 330 335

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
 340 345 350

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
 355 360 365

Leu His Met Gln Ala Leu Pro Pro Arg
 370 375

<210> 23

<211> 379

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 23

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Asp Tyr Ile Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Ser
 85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Glu Gly Thr Gly Ala Asn Ser Ser Leu
 115 120 125

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

Pro Val Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro
 145 150 155 160

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
 165 170 175

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
 180 185 190

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
 195 200 205

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg
 210 215 220

Asn Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
 225 230 235 240

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
 245 250 255

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

Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr
 275 280 285

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
 290 295 300

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
 305 310 315 320

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
 325 330 335

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
 340 345 350

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
 355 360 365

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 370 375

<210> 24

<211> 377

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 24

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
 20 25 30

Ile Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser His Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Asp Tyr Thr His
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Ser
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly
 115 120 125

His Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val
 130 135 140

Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 145 150 155 160

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
 165 170 175

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 180 185 190

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
 195 200 205

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Lys
 210 215 220

Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg
 225 230 235 240

Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro
 245 250 255

Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser
 260 265 270

Ala Asp Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu
 275 280 285

Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg
 290 295 300

Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln
 305 310 315 320

Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr
 325 330 335

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
 340 345 350

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
 355 360 365

Leu His Met Gln Ala Leu Pro Pro Arg
 370 375

<210> 25
 <211> 372
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 25

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Thr Asn His Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Leu Val Ser Ser Ile Ser Gly Asn Gly Arg Thr Thr Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Ser
 85 90 95

Lys Asn Thr Leu Asp Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Gly Gly Glu Thr Leu Val Asp Ser
 115 120 125

Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val Phe
 130 135 140

Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
145 150 155 160

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
165 170 175

Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
180 185 190

Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
195 200 205

Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Cys Trp
210 215 220

Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro Asn Gly Glu
225 230 235 240

Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser Arg Leu Thr
245 250 255

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

Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg
275 280 285

Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu
290 295 300

Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn
305 310 315 320

Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met
325 330 335

Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly
340 345 350

Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala
 355 360 365

Leu Pro Pro Arg
 370

<210> 26
 <211> 373
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 26

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser His Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ala Ala Ile Ser Gly Ser Gly Asp Phe Thr His
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Val Ser Leu Gln Met Asn Asn Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly
 115 120 125

Tyr Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val
 130 135 140

Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 145 150 155 160

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
 165 170 175

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 180 185 190

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
 195 200 205

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Cys
 210 215 220

Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro Asn Gly
 225 230 235 240

Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser Arg Leu
 245 250 255

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

Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
 275 280 285

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
 290 295 300

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
 305 310 315 320

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
 325 330 335

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
 340 345 350

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 355 360 365

Ala Leu Pro Pro Arg
 370

<210> 27

<211> 375

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 27

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
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His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Asp Tyr Ile Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Ser
 85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Glu Gly Thr Gly Ala Asn Ser Ser Leu
 115 120 125

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

Pro Val Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro
 145 150 155 160

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
 165 170 175

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
 180 185 190

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
 195 200 205

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg
 210 215 220

Asn Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
 225 230 235 240

Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser
 245 250 255

Arg Leu Thr Asp Val Thr Leu Arg Val Lys Phe Ser Arg Ser Ala Asp
 260 265 270

Ala Pro Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
 275 280 285

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
 290 295 300

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
 305 310 315 320

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
 325 330 335

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
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Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
 355 360 365

Met Gln Ala Leu Pro Pro Arg
 370 375

<210> 28
 <211> 373
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 28

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
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 20 25 30

Ile Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser His Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Asp Tyr Thr His
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Ser
 100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Glu Asp Gly Gly Ser Leu Leu Gly
 115 120 125

His Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser Phe Val Pro Val
 130 135 140

Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
 145 150 155 160

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
 165 170 175

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
 180 185 190

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
 195 200 205

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Cys
 210 215 220

Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro Asn Gly
 225 230 235 240

Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser Arg Leu
 245 250 255

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

Ala Tyr Gln Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
 275 280 285

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
 290 295 300

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
 305 310 315 320

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
 325 330 335

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
 340 345 350

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 355 360 365

Ala Leu Pro Pro Arg
 370

<210> 29
 <211> 1128
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 29
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 ctctcctgtg cagcctctgg attcaccttt accaaccatg ccatgagttg ggtccgccag 180
 gctccaggga aggggctgga gttggtctca agtattagtg gtaatggctg taccacatac 240
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taccggtcca gagtgaagtt cagcagaagc gccgacgccc ctgcctatca gcagggccag      840
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<210> 30
<211> 1131
<212> DNA
<213> Artificial Sequence

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<220>
<223> Synthetic

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<400> 30
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ctctcctgtg cagcctctgg attcaccttt agcagccatg ccatgacctg ggtccgccag     180
gctccgggga aggggctgga gtgggtcgca gctattagtg gcagtgggtga tttcacacac     240
tacgcagact ccgtgaaggg ccggttcacc atctccagag acaattccaa gaacacggtg      300
tctctgcaaa tgaacaacct gagagccgag gacacggccg tatattactg tgcgaaagat      360
gaggatgggtg ggagcttgct tggctacaga ggccagggca ccctgggtcac cgtctcctca     420
ttcgtgcccc tgttcctgcc tgccaagcct acaacaaccc ctgctcctag acctcctaca     480

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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 31
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 ctctcctgtg cagcctctgg attcaccttt agcagctatg ccatgagctg ggtccgccag 180
 gctccaggga aggggctgga gtgggtctca tctattagt gtagtggtga ttacatatac 240
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 tgcaaccacc ggaacagaag caagcggagc cggctgctgc acagcgacta catgaacatg 720
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 ctggacaaaa gacgtggccg ggaccctgag atggggggaa agccgagaag gaagaaccct 960
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<210> 32
 <211> 1131
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 32
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 ctctcctgtg cagcctctgg attcaccttt agcagccatg ccatgacctg ggtccgccag 180
 gctccgggga aggggctgga gtgggtctca gctattagtg gtagtgggtga ttacacacac 240
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<210> 33
 <211> 1131
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 33
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 gctcctacaa tcgccagcca gcctctgtct ctgaggcctg aagctttag acctgtgct 540
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<210> 34
 <211> 1134
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 34
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cccggtgcaga ccacccagga agaggacggc tgctcctgca gattccccga ggaagaagaa      780
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ggccagaacc agctgtacaa cgagctgaac ctgggcagac gggaagagta cgatgtgctg      900
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gaaggcctgt acaatgaact gcagaaagat aagatggcgg aggcctacag tgagattggg     1020
atgaaaggcg agcgccggag gggcaagggg cacgatggcc tttaccaggg tctcagtaca     1080
gccaccaagg acacctacga cgcccttcac atgcaggccc tgccccctcg ctaa           1134

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<210> 35
<211> 1140
<212> DNA
<213> Artificial Sequence

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<220>
<223> Synthetic

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<400> 35
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ctctcctgtg cagcctctgg attcaccttt agcagctatg ccatgagctg ggtccgccag     180
gctccaggga aggggctgga gtgggtctca tctattagt gtagtggtga ttacatatac     240
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cctacaccag ctctacaat cgccagccag cctctgtctc tgaggcctga agcttgtaga     540
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tgggcccctc tggctggaac atgtggcggt ttgctgctga gcctcgtgat caccctgtac     660
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attgggatga aaggcgagcg ccggaggggc aaggggcacg atggccttta ccagggtctc	1080
agtacagcca ccaaggacac ctacgacgcc cttcacatgc aggccctgcc ccctcgctaa	1140

<210> 36
 <211> 1134
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 36	
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atgaaaggcg agcgccggag gggcaagggg cacgatggcc tttaccaggg tctcagtaca	1080
gccaccaagg acacctacga cgcccttcac atgcaggccc tgccccctcg ctaa	1134

<210> 37
 <211> 1119
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 37	
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tacgcagact ccgtgaaggg ccggttcacc atctccagag acattttcaa gaacacgctg	300
gatctgcaaa tgaacagcct gagagccgag gacacggccg tatattactg tgcgaaagat	360
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1122

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Val Lys Gly Thr Asn Ala Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu
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Ile Ile Ser Leu Ala Val Phe Val Leu Met Phe Leu Leu Arg Lys Ile
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Asn Ser Glu Pro Leu Lys Asp Glu Phe Lys Asn Thr Gly Ser Gly Leu
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Leu Gly Met Ala Asn Ile Asp Leu Glu Lys Ser Arg Thr Gly Asp Glu
100 105 110

Ile Ile Leu Pro Arg Gly Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys
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Glu Asp Cys Ile Lys Ser Lys Pro Lys Val Asp Ser Asp His Cys Phe
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Pro Leu Pro Ala Met Glu Glu Gly Ala Thr Ile Leu Val Thr Thr Lys
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Thr Asn Asp Tyr Cys Lys Ser Leu Pro Ala Ala Leu Ser Ala Thr Glu
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Ile Glu Lys Ser Ile Ser Ala Arg
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