

eolf-seql
SEQUENCE LISTING

<110> ALTERNATIVE GENE EXPRESSION S.L.
<120> EXPRESSION OF RECOMBINANT PROTEINS IN TRICHOPLUSIA NI PUPAE
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<150> EP15382451
<151> 17.09.2015
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<170> PatentIn version 3.5

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eolf-seql

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eolf-seql

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eolf-seql

<213> Autographa californica nucleopolyhedrovirus

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eolf-seql

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Glu Ser Leu Glu Gln Pro Val Val Glu Gln Pro Ser Pro Ser Ser Ala
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Tyr His Ala Glu Ser Phe Glu His Ser Ala Gly Val Asn Gln Pro Ser
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Ala Thr Gly Thr Lys Arg Lys Leu Asp Glu Tyr Leu Asp Asn Ser Gln
130 135 140

Gly Val Val Gly Gln Phe Asn Lys Ile Lys Leu Arg Pro Lys Tyr Lys
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Lys Ser Thr Ile Gln Ser Cys Ala Thr Leu Glu Gln Thr Ile Asn His
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Asn Thr Asn Ile Cys Thr Val Ala Ser Thr Gln Glu Ile Thr His Tyr
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Phe Thr Asn Asp Phe Ala Pro Tyr Leu Met Arg Phe Asp Asp Asn Asp
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Tyr Asn Ser Asn Arg Phe Ser Asp His Met Ser Glu Thr Gly Tyr Tyr
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Met Phe Val Val Lys Lys Ser Glu Val Lys Pro Phe Glu Ile Ile Phe
225 230 235 240

Ala Lys Tyr Val Ser Asn Val Val Tyr Glu Tyr Thr Asn Asn Tyr Tyr
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Met Val Asp Asn Arg Val Phe Val Val Thr Phe Asp Lys Ile Arg Phe
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eolf-seql

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Ser Gln Asp Val Cys Asn Asp Glu Thr Ala Ala Gln Asn Cys Lys Lys
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Cys His Phe Val Asp Val His His Thr Phe Lys Ala Ala Leu Thr Ser
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Tyr Phe Asn Leu Asp Met Tyr Tyr Ala Gln Thr Thr Phe Val Thr Leu
325 330 335

Leu Gln Ser Leu Gly Glu Arg Lys Cys Gly Phe Leu Leu Ser Lys Leu
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Tyr Glu Met Tyr Gln Asp Lys Asn Leu Phe Thr Leu Pro Ile Met Leu
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Ser Arg Lys Glu Ser Asn Glu Ile Glu Thr Ala Ser Asn Asn Phe Phe
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Val Ser Pro Tyr Val Ser Gln Ile Leu Lys Tyr Ser Glu Ser Val Gln
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Ile Val Asn Lys Lys Ser Thr Leu Thr Tyr Lys Tyr Ser Ser Val Ala
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Asn Asn Ala Glu Asn Leu Lys Lys Val Lys Lys Glu Asp Gly Ser Met
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His Ile Val Glu Gln Tyr Leu Thr Gln Asn Val Asp Asn Val Lys Gly
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Ala Lys Lys Asn Lys Glu Phe Tyr Trp Ile Ser Gly Glu Ile Lys Asp
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Val Asp Val Ser Gln Val Ile Gln Lys Tyr Asn Arg Phe Lys His His
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Met Phe Val Ile Gly Lys Val Asn Arg Arg Glu Ser Thr Thr Leu His
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Asn Asn Leu Leu Lys Leu Leu Ala Leu Ile Leu Gln Gly Leu Val Pro
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Val Asn Asn Gln Val Thr Met Thr Gln Ile Asn Phe Asn Ala Ser Tyr
50 55 60

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Glu Phe Cys Asp Lys Gln Pro Asn Asp Tyr Leu Ser Tyr Tyr Asn His
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Pro Thr Pro Asp Gly Ala Asp Thr Val Ile Ser Asp Ser Glu Thr Ala
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Ala Ala Ser Asn Phe Leu Ala Ser Val Asn Ser Leu Thr Asp Asn Asp
115 120 125

Leu Val Glu Cys Leu Leu Lys Thr Thr Asp Asn Leu Glu Glu Ala Val
130 135 140

Ser Ser Ala Tyr Tyr Ser Glu Ser Leu Glu Gln Pro Val Val Glu Gln
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Pro Ser Pro Ser Ser Ala Tyr His Ala Glu Ser Phe Glu His Ser Ala
165 170 175

Gly Val Asn Gln Pro Ser Ala Thr Gly Thr Lys Arg Lys Leu Asp Glu
180 185 190

Tyr Leu Asp Asn Ser Gln Gly Val Val Gly Gln Phe Asn Lys Ile Lys
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Leu Arg Pro Lys Tyr Lys Lys Ser Thr Ile Gln Ser Cys Ala Thr Leu
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Glu Gln Thr Ile Asn His Asn Thr Asn Ile Cys Thr Val Ala Ser Thr
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Gln Glu Ile Thr His Tyr Phe Thr Asn Asp Phe Ala Pro Tyr Leu Met
245 250 255

Arg Phe Asp Asp Asn Asp Tyr Asn Ser Asn Arg Phe Ser Asp His Met
260 265 270

eolf-seql

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275 280 285

Pro Phe Glu Ile Ile Phe Ala Lys Tyr Val Ser Asn Val Val Tyr Glu
290 295 300

Tyr Thr Asn Asn Tyr Tyr Met Val Asp Asn Arg Val Phe Val Val Thr
305 310 315 320

Phe Asp Lys Ile Arg Phe Met Ile Ser Tyr Asn Leu Val Lys Glu Thr
325 330 335

Gly Ile Glu Ile Pro His Ser Gln Asp Val Cys Asn Asp Glu Thr Ala
340 345 350

Ala Gln Asn Cys Lys Lys Cys His Phe Val Asp Val His His Thr Phe
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Lys Ala Ala Leu Thr Ser Tyr Phe Asn Leu Asp Met Tyr Tyr Ala Gln
370 375 380

Thr Thr Phe Val Thr Leu Leu Gln Ser Leu Gly Glu Arg Lys Cys Gly
385 390 395 400

Phe Leu Leu Ser Lys Leu Tyr Glu Met Tyr Gln Asp Lys Asn Leu Phe
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Thr Leu Pro Ile Met Leu Ser Arg Lys Glu Ser Asn Glu Ile Glu Thr
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Ala Ser Asn Asn Phe Phe Val Ser Pro Tyr Val Ser Gln Ile Leu Lys
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Tyr Ser Glu Ser Val Gln Phe Pro Asp Asn Pro Pro Asn Lys Tyr Val
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465 470 475 480

eolf-seq1

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Val Asp Asn Val Lys Gly His Asn Phe Ile Val Leu Ser Phe Lys Asn
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Glu Glu Arg Leu Thr Ile Ala Lys Lys Asn Lys Glu Phe Tyr Trp Ile
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Ser Gly Glu Ile Lys Asp Val Asp Val Ser Gln Val Ile Gln Lys Tyr
565 570 575

Asn Arg Phe Lys His His Met Phe Val Ile Gly Lys Val Asn Arg Arg
580 585 590

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Ser Arg Ala Ser Phe Asp Asn Ser Tyr Ser Glu Phe Cys Asp Lys Gln

eolf-seql

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25

30

Pro Asn Asp Tyr Leu Ser Tyr Tyr Asn His Pro Thr Pro Asp Gly Ala
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Asp Thr Val Ile Ser Asp Ser Glu Thr Ala Ala Ala Ser Asn Phe Leu
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Lys Thr Thr Asp Asn Leu Glu Glu Ala Val Ser Ser Ala Tyr Tyr Ser
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Tyr His Ala Glu Ser Phe Glu His Ser Ala Gly Val Asn Gln Pro Ser
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Lys Ser Thr Ile Gln Ser Cys Ala Thr Leu Glu Gln Thr Ile Asn His
 165 170 175

Asn Thr Asn Ile Cys Thr Val Ala Ser Thr Gln Glu Ile Thr His Tyr
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Val Asn Asn Gln Val Thr Met Thr Gln Ile Asn Phe Asn Ala Ser Tyr
50 55 60

Thr Ser Ala Ser Thr Pro Ser Arg Ala Ser Phe Asp Asn Ser Tyr Ser
65 70 75 80

Glu Phe Cys Asp Lys Gln Pro Asn Asp Tyr Leu Ser Tyr Tyr Asn His
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Pro Thr Pro Asp Gly Ala Asp Thr Val Ile Ser Asp Ser Glu Thr Ala
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Ala Ala Ser Asn Phe Leu Ala Ser Val Asn Ser Leu Thr Asp Asn Asp
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Leu Val Glu Cys Leu Leu Lys Thr Thr Asp Asn Leu Glu Glu Ala Val
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Pro Ser Pro Ser Ser Ala Tyr His Ala Glu Ser Phe Glu His Ser Ala
165 170 175

Gly Val Asn Gln Pro Ser Ala Thr Gly Thr Lys Arg Lys Leu Asp Glu
180 185 190

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Tyr Leu Asp Asn Ser Gln Gly Val Val Gly Gln Phe Asn Lys Ile Lys
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Leu Arg Pro Lys Tyr Lys Lys Ser Thr Ile Gln Ser Cys Ala Thr Leu
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Glu Gln Thr Ile Asn His Asn Thr Asn Ile Cys Thr Val Ala Ser Thr
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Gln Glu Ile Thr His Tyr Phe Thr Asn Asp Phe Ala Pro Tyr Leu Met
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ac 122

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<212> DNA
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<220>
<223> Recombinant chimeric promoter

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<220>
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eolf-seql

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<211> 436

<212> DNA

<213> Autographa californica nucleopolyhedrovirus

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<210> 15

<211> 3163

<212> DNA

<213> Artificial Sequence

<220>

<223> Recombinant expression cassette

<400> 15

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eolf-seql

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eolf-seql

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eolf-seql

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eolf-seql

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<220>

<223> Recombinant expression cassette

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eolf-seql

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eolf-seql

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eolf-seql

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<213> Artificial Sequence

<220>

<223> Recombinant expression cassette

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eolf-seql

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eolf-seq1

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eolf-seql

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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Recombinant expression cassette

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eolf-seq1

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eolf-seql

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<210> 21

<211> 881

<212> DNA

<213> Autographa californica nucleopolyhedrovirus

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eolf-seql

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

<220>
 <223> Recombinant DNA construct fusing the Ac-ie-01 cDNA to the polh promoter

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eolf-seql

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eolf-seql

<210> 23
 <211> 911
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Recombinant DNA construct fusing the GFP cDNA to the polh promoter

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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> hr1pB2(9)p10

eolf-seql

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eolf-seql

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 <211> 702
 <212> DNA
 <213> Porcine circovirus type 2

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 <211> 233
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 <213> Porcine circovirus type 2

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 Arg His Arg Tyr Arg Trp Arg Arg Lys Asn Gly Ile Phe Asn Thr Arg
 35 40 45

eolf-seql

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

Pro Pro Gly Gly Gly Thr Asn Lys Ile Ser Ile Pro Phe Glu Tyr Tyr
85 90 95

Arg Ile Arg Lys Val Lys Val Glu Phe Trp Pro Cys Ser Pro Ile Thr
100 105 110

Gln Gly Asp Arg Gly Val Gly Ser Thr Ala Val Ile Leu Asp Asp Asn
115 120 125

Phe Val Thr Lys Ala Thr Ala Leu Thr Tyr Asp Pro Tyr Val Asn Tyr
130 135 140

Ser Ser Arg His Thr Ile Pro Gln Pro Phe Ser Tyr His Ser Arg Tyr
145 150 155 160

Phe Thr Pro Lys Pro Val Leu Asp Arg Thr Ile Asp Tyr Phe Gln Pro
165 170 175

Asn Asn Lys Lys Asn Gln Leu Trp Leu Arg Leu Gln Thr Ser Ala Asn
180 185 190

Val Asp His Val Gly Leu Gly Thr Ala Phe Glu Asn Ser Lys Tyr Asp
195 200 205

Gln Asp Tyr Asn Ile Arg Val Thr Met Tyr Val Gln Phe Arg Glu Phe
210 215 220

Asn Leu Lys Asp Pro Pro Leu Lys Pro
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<211> 4550

<212> DNA

<213> Artificial Sequence

eolf-seql

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<223> polhAc-ie-01/hrp6.9p10Cap-p10

<400> 27

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eolf-seql

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eolf-seql

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eolf-seql

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<220>
 <223> polhCap

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<210> 29
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eolf-seql

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eolf-seql

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eolf-seql

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eolf-seql

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eolf-seql

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eolf-seql

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eolf-seq1

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eolf-seql

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<212> PRT

<213> Rabbit hemorrhagic disease virus AST89

<400> 36

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

Ser Val Ala Asp Ala Pro Gly Ser Ile Leu Tyr Thr Val Gln His Ser
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Pro Gln Asn Asn Pro Phe Thr Ala Val Leu Ser Gln Met Tyr Ala Gly
100 105 110

Trp Ala Gly Gly Met Gln Phe Arg Phe Ile Val Ala Gly Ser Gly Val
115 120 125

Phe Gly Gly Arg Leu Val Ala Ala Val Ile Pro Pro Gly Ile Glu Ile
130 135 140

Gly Pro Gly Leu Glu Val Arg Gln Phe Pro His Val Val Ile Asp Ala
145 150 155 160

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Arg Ser Leu Glu Pro Val Thr Ile Thr Met Pro Asp Leu Arg Pro Asn
165 170 175

Met Tyr His Pro Thr Gly Asp Pro Gly Leu Val Pro Thr Leu Val Leu
180 185 190

Ser Val Tyr Asn Asn Leu Ile Asn Pro Phe Gly Gly Ser Thr Ser Ala
195 200 205

Ile Gln Val Thr Val Glu Thr Arg Pro Ser Glu Asp Phe Glu Phe Val
210 215 220

Met Ile Arg Ala Pro Ser Ser Lys Thr Val Asp Ser Ile Ser Pro Ala
225 230 235 240

Gly Leu Leu Thr Thr Pro Val Leu Thr Gly Val Gly Asn Asp Asn Arg
245 250 255

Trp Asn Gly Gln Ile Val Gly Leu Gln Pro Val Pro Gly Gly Phe Ser
260 265 270

Thr Cys Asn Arg His Trp Asn Leu Asn Gly Ser Thr Tyr Gly Trp Ser
275 280 285

Ser Pro Arg Phe Ala Asp Ile Asp His Arg Arg Gly Ser Ala Ser Tyr
290 295 300

Pro Gly Ser Asn Ala Thr Asn Val Leu Gln Phe Trp Tyr Ala Asn Ala
305 310 315 320

Gly Ser Ala Ile Asp Asn Pro Ile Ser Gln Val Ala Pro Asp Gly Phe
325 330 335

Pro Asp Met Ser Phe Val Pro Phe Asn Gly Pro Gly Ile Pro Ala Ala
340 345 350

Gly Trp Val Gly Phe Gly Ala Ile Trp Asn Ser Asn Ser Gly Ala Pro
355 360 365

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Asn Val Thr Thr Val Gln Ala Tyr Glu Leu Gly Phe Ala Thr Gly Ala
370 375 380

Pro Gly Asn Leu Gln Pro Thr Thr Asn Thr Ser Gly Ser Gln Thr Val
385 390 395 400

Ala Lys Ser Ile Tyr Ala Val Val Thr Gly Thr Ala Gln Asn Pro Ala
405 410 415

Gly Leu Phe Val Met Ala Ser Gly Val Ile Ser Thr Pro Ser Ala Asn
420 425 430

Ala Ile Thr Tyr Thr Pro Gln Pro Asp Arg Ile Val Thr Thr Pro Gly
435 440 445

Thr Pro Ala Ala Ala Pro Val Gly Lys Asn Thr Pro Ile Met Phe Ala
450 455 460

Ser Val Val Arg Arg Thr Gly Asp Val Asn Ala Thr Ala Gly Ser Ala
465 470 475 480

Asn Gly Thr Gln Tyr Gly Thr Gly Ser Gln Pro Leu Pro Val Thr Ile
485 490 495

Gly Leu Ser Leu Asn Asn Tyr Ser Ser Ala Leu Met Pro Gly Gln Phe
500 505 510

Phe Val Trp Gln Leu Thr Phe Ala Ser Gly Phe Met Glu Ile Gly Leu
515 520 525

Ser Val Asp Gly Tyr Phe Tyr Ala Gly Thr Gly Ala Ser Thr Thr Leu
530 535 540

Ile Asp Leu Thr Glu Leu Ile Asp Val Arg Pro Val Gly Pro Arg Pro
545 550 555 560

Ser Lys Ser Thr Leu Val Phe Asn Leu Gly Gly Thr Ala Asn Gly Phe
565 570 575

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Ser Tyr Val

<210> 37
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 <212> PRT
 <213> Rabbit hemorrhagic disease virus N11

<400> 37

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Gly Val Val Ala Thr Thr Ser Val Val Thr Thr Glu Asn Ala Ser Thr
 35 40 45

Ser Ile Ala Thr Ala Gly Ile Gly Gly Pro Pro Gln Gln Val Asp Gln
 50 55 60

Gln Glu Thr Trp Arg Thr Asn Phe Tyr Tyr Asn Asp Val Phe Thr Trp
 65 70 75 80

Ser Val Ala Asp Ala Pro Gly Asn Ile Leu Tyr Thr Val Gln His Ser
 85 90 95

Pro Gln Asn Asn Pro Phe Thr Ala Val Leu Ser Gln Met Tyr Ala Gly
 100 105 110

Trp Ala Gly Gly Met Gln Phe Arg Phe Ile Val Ala Gly Ser Gly Val
 115 120 125

Phe Gly Gly Arg Leu Val Ala Ala Val Ile Pro Pro Gly Ile Glu Ile
 130 135 140

Gly Pro Gly Leu Glu Val Arg Gln Phe Pro His Val Val Ile Asp Ala
 145 150 155 160

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Arg Ser Leu Glu Pro Val Thr Ile Thr Met Pro Asp Leu Arg Pro Asn
165 170 175

Met Tyr His Pro Thr Gly Asn Pro Gly Leu Val Pro Thr Leu Val Leu
180 185 190

Ser Val Tyr Asn Asn Leu Ile Asn Pro Phe Gly Gly Ser Thr Ser Ala
195 200 205

Ile Gln Val Thr Val Glu Thr Arg Pro Ser Glu Asp Phe Glu Phe Val
210 215 220

Met Ile Arg Ala Pro Ser Ser Lys Thr Val Asp Ser Ile Ser Pro Ala
225 230 235 240

Asp Leu Leu Thr Thr Pro Val Leu Thr Gly Val Gly Thr Asp Asn Arg
245 250 255

Trp Asn Gly Glu Ile Val Gly Leu Gln Pro Val Pro Gly Gly Phe Ser
260 265 270

Thr Cys Asn Arg His Trp Asn Leu Asn Gly Ser Thr Phe Gly Trp Ser
275 280 285

Ser Pro Arg Phe Ala Ala Ile Asp His Asp Arg Gly Asn Ala Ser Tyr
290 295 300

Pro Gly Ser Ser Ser Ser Asn Val Leu Glu Leu Trp Tyr Ala Ser Ala
305 310 315 320

Gly Ser Ala Ala Asp Asn Pro Ile Ser Gln Ile Ala Pro Asp Gly Phe
325 330 335

Pro Asp Met Ser Phe Val Pro Phe Ser Gly Thr Thr Val Pro Thr Ala
340 345 350

Gly Trp Val Gly Phe Gly Gly Ile Trp Asn Ser Ser Asn Gly Ala Pro
355 360 365

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Phe Val Thr Thr Val Gln Ala Tyr Glu Leu Gly Phe Ala Thr Gly Ala
370 375 380

Pro Ser Asn Pro Gln Pro Thr Thr Thr Thr Ser Gly Ala Gln Ile Val
385 390 395 400

Ala Lys Ser Ile Tyr Gly Val Ala Thr Gly Ile Asn Gln Ala Thr Ala
405 410 415

Gly Leu Phe Val Met Ala Ser Gly Val Ile Ser Thr Pro Asn Ser Ser
420 425 430

Ala Ile Thr Tyr Thr Pro Gln Pro Asn Arg Ile Val Asn Ala Pro Gly
435 440 445

Thr Pro Ala Ala Ala Pro Ile Gly Lys Asn Thr Pro Ile Met Phe Ala
450 455 460

Ser Val Val Arg Arg Thr Gly Asp Ile Asn Ala Glu Ala Gly Ser Thr
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Asn Gly Thr Gln Tyr Gly Ala Gly Ser Gln Pro Leu Pro Val Thr Val
485 490 495

Gly Leu Ser Leu Asn Asn Tyr Ser Ser Ala Leu Met Pro Gly Gln Phe
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Phe Val Trp Gln Leu Asn Phe Ala Ser Gly Phe Met Glu Leu Gly Leu
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Ser Val Asp Gly Tyr Phe Tyr Ala Gly Thr Gly Ala Ser Ala Thr Leu
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Ile Asp Leu Ser Glu Leu Val Asp Ile Arg Pro Val Gly Pro Arg Pro
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Ser Thr Ser Thr Leu Val Tyr Asn Leu Gly Gly Thr Thr Asn Gly Phe
565 570 575

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Ser Tyr Val

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