

SEQUENCE LISTING

<110> GLAXOSMITHKLINE BIOLOGICALS SA

<120> CMV ANTIGEN AND USES THEREOFF

<130> VN056504 WO

<140>

<141>

<150> EP 15152221.6

<151> 2015-01-22

<160> 27

<170> PatentIn version 3.5

<210> 1

<211> 278

<212> PRT

<213> Human herpesvirus 5

<400> 1

Met	Cys	Arg	Arg	Pro	Asp	Cys	Gly	Phe	Ser	Phe	Ser	Pro	Gly	Pro	Val
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Ile	Leu	Leu	Trp	Cys	Cys	Leu	Leu	Leu	Pro	Ile	Val	Ser	Ser	Ala	Ala
			20					25					30		

Val	Ser	Val	Ala	Pro	Thr	Ala	Ala	Glu	Lys	Val	Pro	Ala	Glu	Cys	Pro
		35					40					45			

Glu	Leu	Thr	Arg	Arg	Cys	Leu	Leu	Gly	Glu	Val	Phe	Glu	Gly	Asp	Lys
	50					55					60				

Tyr	Glu	Ser	Trp	Leu	Arg	Pro	Leu	Val	Asn	Val	Thr	Gly	Arg	Asp	Gly
65					70					75					80

Pro	Leu	Ser	Gln	Leu	Ile	Arg	Tyr	Arg	Pro	Val	Thr	Pro	Glu	Ala	Ala
				85					90					95	

Asn	Ser	Val	Leu	Leu	Asp	Glu	Ala	Phe	Leu	Asp	Thr	Leu	Ala	Leu	Leu
			100					105					110		

Tyr Asn Asn Pro Asp Gln Leu Arg Ala Leu Leu Thr Leu Leu Ser Ser
115 120 125

Asp Thr Ala Pro Arg Trp Met Thr Val Met Arg Gly Tyr Ser Glu Cys
130 135 140

Gly Asp Gly Ser Pro Ala Val Tyr Thr Cys Val Asp Asp Leu Cys Arg
145 150 155 160

Gly Tyr Asp Leu Thr Arg Leu Ser Tyr Gly Arg Ser Ile Phe Thr Glu
165 170 175

His Val Leu Gly Phe Glu Leu Val Pro Pro Ser Leu Phe Asn Val Val
180 185 190

Val Ala Ile Arg Asn Glu Ala Thr Arg Thr Asn Arg Ala Val Arg Leu
195 200 205

Pro Val Ser Thr Ala Ala Ala Pro Glu Gly Ile Thr Leu Phe Tyr Gly
210 215 220

Leu Tyr Asn Ala Val Lys Glu Phe Cys Leu Arg His Gln Leu Asp Pro
225 230 235 240

Pro Leu Leu Arg His Leu Asp Lys Tyr Tyr Ala Gly Leu Pro Pro Glu
245 250 255

Leu Lys Gln Thr Arg Val Asn Leu Pro Ala His Ser Arg Tyr Gly Pro
260 265 270

Gln Ala Val Asp Ala Arg
275

<210> 2

<211> 278

<212> PRT

<213> Human herpesvirus 5

<400> 2

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

Ala Leu Leu Trp Cys Cys Leu Leu Leu Pro Ile Val Ser Ser Ala Thr
20 25 30

Val Ser Val Ala Pro Thr Val Ala Glu Lys Val Pro Ala Glu Cys Pro
35 40 45

Glu Leu Thr Arg Arg Cys Leu Leu Gly Glu Val Phe Gln Gly Asp Lys
50 55 60

Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr Arg Arg Asp Gly
65 70 75 80

Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr Pro Glu Ala Ala
85 90 95

Asn Ser Val Leu Leu Asp Asp Ala Phe Leu Asp Thr Leu Ala Leu Leu
100 105 110

Tyr Asn Asn Pro Asp Gln Leu Arg Ala Leu Leu Thr Leu Leu Ser Ser
115 120 125

Asp Thr Ala Pro Arg Trp Met Thr Val Met Arg Gly Tyr Ser Glu Cys
130 135 140

Gly Asp Gly Ser Pro Ala Val Tyr Thr Cys Val Asp Asp Leu Cys Arg
145 150 155 160

Gly Tyr Asp Leu Thr Arg Leu Ser Tyr Gly Arg Ser Ile Phe Thr Glu
165 170 175

His Val Leu Gly Phe Glu Leu Val Pro Pro Ser Leu Phe Asn Val Val
180 185 190

Val Ala Ile Arg Asn Glu Ala Thr Arg Thr Asn Arg Ala Val Arg Leu
195 200 205

Pro Val Ser Thr Ala Ala Ala Pro Glu Gly Ile Thr Leu Phe Tyr Gly
210 215 220

Leu Tyr Asn Ala Val Lys Glu Phe Cys Leu Arg His Gln Leu Asp Pro
225 230 235 240

Pro Leu Leu Arg His Leu Asp Lys Tyr Tyr Ala Gly Leu Pro Pro Glu
245 250 255

Leu Lys Gln Thr Arg Val Asn Leu Pro Ala His Ser Arg Tyr Gly Pro
260 265 270

Gln Ala Val Asp Ala Arg
275

<210> 3
<211> 278
<212> PRT
<213> Human herpesvirus 5

<400> 3
Met Cys Arg Arg Pro Asp Cys Gly Phe Ser Phe Ser Pro Gly Pro Val
1 5 10 15

Val Leu Leu Trp Cys Cys Leu Leu Leu Pro Ile Val Ser Ser Val Ala
20 25 30

Val Ser Val Ala Pro Thr Ala Ala Glu Lys Val Pro Ala Glu Cys Pro
35 40 45

Glu Leu Thr Arg Arg Cys Leu Leu Gly Glu Val Phe Gln Gly Asp Lys
50 55 60

Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr Arg Arg Asp Gly
65 70 75 80

Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr Pro Glu Ala Ala
85 90 95

Asn Ser Val Leu Leu Asp Asp Ala Phe Leu Asp Thr Leu Ala Leu Leu
100 105 110

Tyr Asn Asn Pro Asp Gln Leu Arg Ala Leu Leu Thr Leu Leu Ser Ser
115 120 125

Asp Thr Ala Pro Arg Trp Met Thr Val Met Arg Gly Tyr Ser Glu Cys
130 135 140

Gly Asp Gly Ser Pro Ala Val Tyr Thr Cys Val Asp Asp Leu Cys Arg
145 150 155 160

Gly Tyr Asp Leu Thr Arg Leu Ser Tyr Gly Arg Ser Ile Phe Thr Glu
165 170 175

His Val Leu Gly Phe Glu Leu Val Pro Pro Ser Leu Phe Asn Val Val
180 185 190

Val Ala Ile Arg Asn Glu Ala Thr Arg Thr Asn Arg Ala Val Arg Leu
195 200 205

Pro Val Ser Thr Ala Ala Ala Pro Glu Gly Ile Thr Leu Phe Tyr Gly
210 215 220

Leu Tyr Asn Ala Val Lys Glu Phe Cys Leu Arg His Gln Leu Asp Pro
225 230 235 240

Pro Leu Leu Arg His Leu Asp Lys Tyr Tyr Ala Gly Leu Pro Pro Glu
245 250 255

Leu Lys Gln Thr Arg Val Asn Leu Pro Ala His Ser Arg Tyr Gly Pro
260 265 270

Gln Ala Val Asp Ala Arg
275

<210> 4

<211> 248

<212> PRT

<213> Human herpesvirus 5

<400> 4

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

Cys Pro Glu Leu Thr Arg Arg Cys Leu Leu Gly Glu Val Phe Glu Gly
20 25 30

Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr Gly Arg
35 40 45

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

Ala Ala Asn Ser Val Leu Leu Asp Glu Ala Phe Leu Asp Thr Leu Ala
65 70 75 80

Leu Leu Tyr Asn Asn Pro Asp Gln Leu Arg Ala Leu Leu Thr Leu Leu
85 90 95

Ser Ser Asp Thr Ala Pro Arg Trp Met Thr Val Met Arg Gly Tyr Ser
100 105 110

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

Cys Arg Gly Tyr Asp Leu Thr Arg Leu Ser Tyr Gly Arg Ser Ile Phe
130 135 140

Thr Glu His Val Leu Gly Phe Glu Leu Val Pro Pro Ser Leu Phe Asn
145 150 155 160

Val Val Val Ala Ile Arg Asn Glu Ala Thr Arg Thr Asn Arg Ala Val
165 170 175

Arg Leu Pro Val Ser Thr Ala Ala Ala Pro Glu Gly Ile Thr Leu Phe
180 185 190

Tyr Gly Leu Tyr Asn Ala Val Lys Glu Phe Cys Leu Arg His Gln Leu
195 200 205

Asp Pro Pro Leu Leu Arg His Leu Asp Lys Tyr Tyr Ala Gly Leu Pro
210 215 220

Pro Glu Leu Lys Gln Thr Arg Val Asn Leu Pro Ala His Ser Arg Tyr
225 230 235 240

Gly Pro Gln Ala Val Asp Ala Arg
245

<210> 5
<211> 17
<212> PRT
<213> Human herpesvirus 5

<400> 5
Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
1 5 10 15

Pro

<210> 6
<211> 742
<212> PRT
<213> Human herpesvirus 5

<400> 6
Met Arg Pro Gly Leu Pro Ser Tyr Leu Ile Val Leu Ala Val Cys Leu
1 5 10 15

Leu Ser His Leu Leu Ser Ser Arg Tyr Gly Ala Glu Ala Ile Ser Glu
20 25 30

Pro Leu Asp Lys Ala Phe His Leu Leu Leu Asn Thr Tyr Gly Arg Pro
35 40 45

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

Leu Arg Asn Ser Thr Val Val Arg Glu Asn Ala Ile Ser Phe Asn Phe
65 70 75 80

Phe Gln Ser Tyr Asn Gln Tyr Tyr Val Phe His Met Pro Arg Cys Leu
85 90 95

Phe Ala Gly Pro Leu Ala Glu Gln Phe Leu Asn Gln Val Asp Leu Thr
100 105 110

Glu Thr Leu Glu Arg Tyr Gln Gln Arg Leu Asn Thr Tyr Ala Leu Val
115 120 125

Ser Lys Asp Leu Ala Ser Tyr Arg Ser Phe Ser Gln Gln Leu Lys Ala
130 135 140

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

Leu Ser Ile Pro His Val Trp Met Pro Pro Gln Thr Thr Pro His Gly
165 170 175

Trp Thr Glu Ser His Thr Thr Ser Gly Leu His Arg Pro His Phe Asn
180 185 190

Gln Thr Cys Ile Leu Phe Asp Gly His Asp Leu Leu Phe Ser Thr Val
195 200 205

Thr Pro Cys Leu His Gln Gly Phe Tyr Leu Ile Asp Glu Leu Arg Tyr
210 215 220

Val Lys Ile Thr Leu Thr Glu Asp Phe Phe Val Val Thr Val Ser Ile
225 230 235 240

Asp Asp Asp Thr Pro Met Leu Leu Ile Phe Gly His Leu Pro Arg Val
245 250 255

Leu Phe Lys Ala Pro Tyr Gln Arg Asp Asn Phe Ile Leu Arg Gln Thr
260 265 270

Glu Lys His Glu Leu Leu Val Leu Val Lys Lys Asp Gln Leu Asn Arg
275 280 285

His Ser Tyr Leu Lys Asp Pro Asp Phe Leu Asp Ala Ala Leu Asp Phe
290 295 300

Asn Tyr Leu Asp Leu Ser Ala Leu Leu Arg Asn Ser Phe His Arg Tyr
305 310 315 320

Ala Val Asp Val Leu Lys Ser Gly Arg Cys Gln Met Leu Asp Arg Arg
325 330 335

Thr Val Glu Met Ala Phe Ala Tyr Ala Leu Ala Leu Phe Ala Ala Ala
340 345 350

Arg Gln Glu Glu Ala Gly Ala Gln Val Ser Val Pro Arg Ala Leu Asp
355 360 365

Arg Gln Ala Ala Leu Leu Gln Ile Gln Glu Phe Met Ile Thr Cys Leu
370 375 380

Ser Gln Thr Pro Pro Arg Thr Thr Leu Leu Leu Tyr Pro Thr Ala Val
385 390 395 400

Asp Leu Ala Lys Arg Ala Leu Trp Thr Pro Asn Gln Ile Thr Asp Ile
405 410 415

Thr Ser Leu Val Arg Leu Val Tyr Ile Leu Ser Lys Gln Asn Gln Gln
420 425 430

His Leu Ile Pro Gln Trp Ala Leu Arg Gln Ile Ala Asp Phe Ala Leu
435 440 445

Lys Leu His Lys Thr His Leu Ala Ser Phe Leu Ser Ala Phe Ala Arg
450 455 460

Gln Glu Leu Tyr Leu Met Gly Ser Leu Val His Ser Met Leu Val His
465 470 475 480

Thr Thr Glu Arg Arg Glu Ile Phe Ile Val Glu Thr Gly Leu Cys Ser
485 490 495

Leu Ala Glu Leu Ser His Phe Thr Gln Leu Leu Ala His Pro His His
500 505 510

Glu Tyr Leu Ser Asp Leu Tyr Thr Pro Cys Ser Ser Ser Gly Arg Arg
515 520 525

Asp His Ser Leu Glu Arg Leu Thr Arg Leu Phe Pro Asp Ala Thr Val
530 535 540

Pro Thr Thr Val Pro Ala Ala Leu Ser Ile Leu Ser Thr Met Gln Pro
545 550 555 560

Ser Thr Leu Glu Thr Phe Pro Asp Leu Phe Cys Leu Pro Leu Gly Glu
565 570 575

Ser Phe Ser Ala Leu Thr Val Ser Glu His Val Ser Tyr Val Val Thr
580 585 590

Asn Gln Tyr Leu Ile Lys Gly Ile Ser Tyr Pro Val Ser Thr Thr Val
595 600 605

Val Gly Gln Ser Leu Ile Ile Thr Gln Thr Asp Ser Gln Thr Lys Cys
610 615 620

Glu Leu Thr Arg Asn Met His Thr Thr His Ser Ile Thr Ala Ala Leu
625 630 635 640

Asn Ile Ser Leu Glu Asn Cys Ala Phe Cys Gln Ser Ala Leu Leu Glu
645 650 655

Tyr Asp Asp Thr Gln Gly Val Ile Asn Ile Met Tyr Met His Asp Ser
660 665 670

Asp Asp Val Leu Phe Ala Leu Asp Pro Tyr Asn Glu Val Val Val Ser
675 680 685

Ser Pro Arg Thr His Tyr Leu Met Leu Leu Lys Asn Gly Thr Val Leu
690 695 700

Glu Val Thr Asp Val Val Val Asp Ala Thr Asp Ser Arg Leu Leu Met
705 710 715 720

Met Ser Val Tyr Ala Leu Ser Ala Ile Ile Gly Ile Tyr Leu Leu Tyr
725 730 735

Arg Met Leu Lys Thr Cys
740

<210> 7
<211> 6
<212> PRT
<213> Human herpesvirus 5

<400> 7
Asn Ser Val Leu Leu Asp
1 5

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 8

Asp Tyr Lys Asp Asp Asp Asp Lys

1 5

<210> 9

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 9

Ala Trp Arg His Pro Gln Phe Gly Gly

1 5

<210> 10

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 10

Trp Ser His Pro Gln Phe Glu Lys

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<210> 11

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic 6xHis tag"

<400> 11

His His His His His His

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<210> 12
<211> 40
<212> PRT
<213> Herpes simplex virus 2

<400> 12
Asp Asp Val Ser Trp Arg Tyr Glu Ala Pro Ser Val Ile Asp Tyr Ala
1 5 10 15

Arg Ile Asp Gly Ile Phe Leu Arg Tyr His Cys Pro Gly Leu Asp Thr
20 25 30

Phe Leu Trp Asp Arg His Ala Gln
35 40

<210> 13
<211> 40
<212> PRT
<213> Herpes simplex virus 1

<400> 13
Asp Asp Leu Asp Trp Arg Tyr Glu Thr Pro Ser Ala Ile Asn Tyr Ala
1 5 10 15

Leu Ile Asp Gly Ile Phe Leu Arg Tyr His Cys Pro Gly Leu Asp Thr
20 25 30

Val Leu Trp Asp Arg His Ala Gln
35 40

<210> 14
<211> 39
<212> PRT
<213> Varicella zoster virus

<400> 14
Glu Ala Trp Asp Tyr Ala Ala Pro Pro Val Ser Asn Leu Ser Glu Ala
1 5 10 15

Leu Ser Gly Ile Val Val Lys Thr Lys Cys Pro Val Pro Glu Val Ile
20 25 30

Leu Trp Phe Lys Asp Lys Gln
35

<210> 15

<211> 58

<212> PRT

<213> Human herpesvirus 5

<400> 15

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

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

Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55

<210> 16

<211> 41

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 16

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Glu Ala Leu Ser Gly Val Leu Leu Asp Glu Ala Phe Leu Asp Thr Leu
20 25 30

Ala Leu Leu Tyr Asn Asn Pro Asp Gln
35 40

<210> 17

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 17
Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Glu Ala Leu Ser Gly Val Leu Leu Asp
20 25 30

Glu Ala Phe Leu Asp Thr Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
35 40 45

<210> 18
<211> 58
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 18
Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

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

Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55

<210> 19

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 19
Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

Pro Glu Ala Ala Ser Val Leu Leu Asp Glu Ala Phe Leu Asp Thr Leu
35 40 45

Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55

<210> 20
<211> 58
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 20
Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

Pro Glu Ala Ser Ser Thr Val Leu Leu Asp Glu Ala Phe Leu Asp Thr
35 40 45

Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln

50

55

<210> 21

<211> 58

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 21

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

Pro Glu Ala Leu Ser Gly Ile Leu Leu Asp Glu Ala Phe Leu Asp Thr
35 40 45

Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55

<210> 22

<211> 58

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 22

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

Pro Glu Ala Ile Glu Val Val Leu Leu Asp Glu Ala Phe Leu Asp Thr

35

40

45

Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55

<210> 23

<211> 58

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 23

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

Pro Glu Ala Ile Asp Gly Val Leu Leu Asp Glu Ala Phe Leu Asp Thr
35 40 45

Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55

<210> 24

<211> 58

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 24

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr

20

25

30

Pro Glu Ala Leu Ala Ile Val Leu Leu Asp Glu Ala Phe Leu Asp Thr
35 40 45

Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55

<210> 25

<211> 60

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 25

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr
1 5 10 15

Gly Arg Asp Gly Pro Leu Ser Gln Leu Ile Arg Tyr Arg Pro Val Thr
20 25 30

Pro Glu Asn Leu Tyr Phe Gln Gly Val Leu Leu Asp Glu Ala Phe Leu
35 40 45

Asp Thr Leu Ala Leu Leu Tyr Asn Asn Pro Asp Gln
50 55 60

<210> 26

<211> 58

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 26

Glu Gly Asp Lys Tyr Glu Ser Trp Leu Arg Pro Leu Val Asn Val Thr

