

SEQUENCE LISTING

<110> MedImmune, LLC

<120> BISPECIFIC PD-1 AND TIGIT BINDING PROTEINS AND USES THEREOF

<130> TIGIT-101-WO-PCT

<140> PCT/IB2022/053997

<141> 2022-04-29

<150> US 63/182,156

<151> 2021-04-30

<160> 34

<170> PatentIn version 3.5

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 1

Asp Tyr Gly Met His

1 5

<210> 2

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<213> Artificial Sequence

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Tyr Ile Ser Ser Gly Ser Tyr Thr Ile Tyr Ser Ala Asp Ser Val Lys

1 5 10 15

Gly

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Arg Ala Pro Asn Ser Phe Tyr Glu Tyr Tyr Phe Asp Tyr
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Ser Ala Ser Ser Lys His Thr Asn Leu Tyr Trp Ser Arg His Met Tyr
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Leu Thr Ser Asn Arg Ala Thr
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Gln Gln Trp Ser Ser Asn Pro Phe Thr
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<211> 122

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<213> Artificial Sequence

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<400> 7

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

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

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

Ala Arg Arg Ala Pro Asn Ser Phe Tyr Glu Tyr Tyr Phe Asp Tyr Trp
100 105 110

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

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<211> 452

<212> PRT
<213> Artificial Sequence

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<400> 8

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 Tyr
20 25 30

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

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

Ala Arg Arg Ala Pro Asn Ser Phe Tyr Glu Tyr Tyr Phe Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
115 120 125

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
130 135 140

Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
145 150 155 160

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys Ser
210 215 220

Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Phe Glu
225 230 235 240

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
245 250 255

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
260 265 270

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
275 280 285

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
290 295 300

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
305 310 315 320

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Ser
325 330 335

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
340 345 350

Val Cys Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val
355 360 365

Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr
405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
435 440 445

Ser Pro Gly Lys
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<211> 112
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<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 9

Gln Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
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Glu Arg Ala Thr Leu Ser Cys Ser Ala Ser Ser Lys His Thr Asn Leu
20 25 30

Tyr Trp Ser Arg His Met Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala
35 40 45

Pro Arg Leu Leu Ile Tyr Leu Thr Ser Asn Arg Ala Thr Gly Ile Pro
50 55 60

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

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

Ser Ser Asn Pro Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

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<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 10

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 Ser Ala Ser Ser Lys His Thr Asn Leu
20 25 30

Tyr Trp Ser Arg His Met Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala
35 40 45

Pro Arg Leu Leu Ile Tyr Leu Thr Ser Asn Arg Ala Thr Gly Ile Pro
50 55 60

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

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

Ser Ser Asn Pro Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
180 185 190

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 11
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<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 11

Ser Tyr Ala Met His
1 5

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

<220>
<223> Synthetic peptide

<400> 12

Val Ile Ser Tyr Ala Gly Glu Val Lys Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 13

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 13

Asp Pro Leu Pro Leu His Tyr Tyr Gly Met Asp Val
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<210> 14

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 14

Ser Gly Ser Ser Ser Asn Ile Gly Arg Arg Pro Val Asn
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<210> 15

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<212> PRT

<213> Artificial Sequence

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<223> Synthetic peptide

<400> 15

Ser Gln Asn Gln Arg Pro Ser
1 5

<210> 16
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 16

Ala Val Trp Asp Asp Ile Gly Arg Val Leu Gln
1 5 10

<210> 17
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 17

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 Tyr Ala Gly Glu Val 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 Arg Asp Pro Leu Pro Leu His Tyr Tyr Gly Met Asp Val Trp Gly
100 105 110

Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 18
<211> 451
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 18

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 Tyr Ala Gly Glu Val 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 Arg Asp Pro Leu Pro Leu His Tyr Tyr Gly Met Asp Val Trp Gly
100 105 110

Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

Val Cys Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
195 200 205

Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys Ser Val
210 215 220

Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Phe Glu Gly
225 230 235 240

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
245 250 255

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
260 265 270

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
275 280 285

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
290 295 300

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
305 310 315 320

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Ser Ile
325 330 335

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
340 345 350

Tyr Thr Leu Pro Pro Cys Arg Glu Glu Met Thr Lys Asn Gln Val Ser
355 360 365

Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
370 375 380

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
385 390 395 400

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
405 410 415

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
420 425 430

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
435 440 445

Pro Gly Lys
450

<210> 19
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 19

Gln Ser Val 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 Arg Arg
20 25 30

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

Ile Tyr Ser Gln Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gln Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Phe Cys Ala Val Trp Asp Asp Ile Gly
85 90 95

Arg Val Leu Gln Leu Gly Gly Gly Thr Gln Leu Thr Val Leu
100 105 110

<210> 20

<211> 216

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 20

Gln Ser Val 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 Arg Arg
20 25 30

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

Ile Tyr Ser Gln Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gln Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Phe Cys Ala Val Trp Asp Asp Ile Gly
85 90 95

Arg Val Leu Gln Leu Gly Gly Gly Thr Gln Leu Thr Val Leu Gly Gln
100 105 110

Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Cys Ser Glu Glu
115 120 125

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr
165 170 175

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Val Ser
210 215

<210> 21

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic nucleotide

<400> 21

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tcttgcgccg cctccggctt cacattctcc gactacggca tgcactgggt cgcacaggcc 120

cctggaaagg gcctggaatg ggtggcctac atctcctccg gctcctacac catctactcc	180
gccgactccg tgaagggccg gttcaccatc tcccgggaca acgccaagaa ctccctgtac	240
ctgcagatga actccctgcg ggccgaggac acagccgtgt actactgtgc cagacgggcc	300
cctaactcct tctacgagta ctacttcgac tactggggcc agggcaccac cgtgaccgtg	360
tcctct	366

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 <211> 1359
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic nucleotide

<400> 22	
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cctggaaagg gcctggaatg ggtggcctac atctcctccg gctcctacac catctactcc	180
gccgactccg tgaagggccg gttcaccatc tcccgggaca acgccaagaa ctccctgtac	240
ctgcagatga actccctgcg ggccgaggac acagccgtgt actactgtgc cagacgggcc	300
cctaactcct tctacgagta ctacttcgac tactggggcc agggcaccac cgtgaccgtg	360
tcctctgcta gcaccaaagg tccgagcggt tttccgctgg caccgagcag caaaagcacc	420
tctggtggca ccgcagcact gggttgtctg gtgaaagatt attttccgga accggttacc	480
gtttcttgga atagcgggtgc actgaccagc ggtgttcata cttttccggc agttctgcag	540
agcagcggtc tgtatagcct gtctagcggt gttaccgttc cgagcagcag cctgggcacc	600
cagacctata ttgcaatgt gaatcataaa ccgagcaata caaaagttga taaacgcgtt	660
gaaccgaaaa gctgtgacaa aactcacacg tgcccaccgt gccagcacc tgagttcgag	720
gggggaccgt cagtcttcct cttccccca aaaccaagg acaccctcat gatctcccgg	780
acccttgagg tcacatgcgt ggtggtggac gtgagccacg aagaccctga ggtcaagttc	840
aactggtacg tggacggcgt ggaggtgcat aatgccaaaga caaagccgcg ggaggagcag	900

tacaacagca cgtaccgtgt ggtcagcgtc ctcaccgtcc tgcaccagga ctggctgaat	960
ggcaaggagt acaagtgcaa ggtctccaac aaagccctcc cagccagcat cgagaaaacc	1020
atctccaaag ccaaagggca gccccgagaa ccacaggtct gcaccctgcc cccatcccgg	1080
gaggagatga ccaagaacca ggtcagcctg agctgcgcgg tcaaaggctt ctatcccagc	1140
gacatcgccg tggagtggga gagcaatggg cagccggaga acaactacaa gaccacgcct	1200
cccgtgctgg actccgacgg ctctttcttc ctcgttagca agctcaccgt ggacaagagc	1260
aggtggcagc aggggaacgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac	1320
tacacgcaga agagcctctc cctgtctccg ggtaaata	1359

<210> 23
 <211> 336
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic nucleotide

<400> 23	
cagatcgtgc tgaccagtc ccctgccacc ctgtccctga gccctggcga gagagccacc	60
ctgagctgct ccgcctctc caagcacacc aacctgtact ggtcccggca catgtactgg	120
tatcagcaga agcccggcca ggcccctcgg ctgctgatct acctgacctc taaccgggcc	180
accggcatcc ctgccagatt ctccggctct ggctccggca ccgacttcac cctgaccatc	240
tccagcctgg aaccgagga cttcgccgtg tactactgcc agcagtggtc ctccaacccc	300
ttcaccttcg gccagggcac caagctggaa atcaag	336

<210> 24
 <211> 660
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic nucleotide

<400> 24	
cagatcgtgc tgaccagtc ccctgccacc ctgtccctga gccctggcga gagagccacc	60

ctgagctgct cgcctcctc caagcacacc aacctgtact ggtcccggca catgtactgg	120
tatcagcaga agcccggcca ggcccctcgg ctgctgatct acctgacctc taaccgggcc	180
accggcatcc ctgccagatt ctccggctct ggctccggca ccgacttcac cctgaccatc	240
tccagcctgg aaccgagga cttcgccgtg tactactgcc agcagtggtc ctccaacccc	300
ttcaccttcg gccagggcac caagctggaa atcaagcgta cggtaggctgc accatctgtc	360
ttcatcttcc cgccatctga tgagcagttg aaatctggaa ctgcctctgt tgtgtgcctg	420
ctgaataact tctatcccag agaggccaaa gtacagtggga aggtggataa cgccctccaa	480
tcgggtaact cccaggagag tgtcacagag caggacagca aggacagcac ctacagcctc	540
agcagcacc tgacgtgag caaagcagac tacgagaaac acaaagtcta cgcctgcgaa	600
gtcacccatc agggcctgag ctcgcccgtc acaaagagct tcaacagggg agagtgttag	660

<210> 25
 <211> 363
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic nucleotide

<400> 25	
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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg cgggggaggt gaaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagagacccg	300
ctaccgctac attactacgg tatggacgtc tggggccaag ggaccacggt caccgtctcc	360
tca	363

<210> 26
 <211> 1356
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetic nucleotide

<400> 26

caggtgcagc	tggtggagtc	tggaggaggc	gtggtccagc	ctgggaggtc	cctgagactc	60
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ccaggcaagg	ggctggagtg	ggtggcagtt	atatcatatg	cgggggaggt	gaaatactac	180
gcagactccg	tgaagggccg	attcaccatc	tccagagaca	attccaagaa	cacgctgtat	240
ctgcaaatga	acagcctgag	agctgaggac	acggctgtgt	attactgtgc	gagagacccg	300
ctaccgctac	attactacgg	tatggacgtc	tggggccaag	ggaccacggt	caccgtctcc	360
tcagcgtcga	ccaaaggtcc	gagcgtgtgc	ccgctggcac	cgagcagcaa	aagcacctct	420
ggtggcaccg	cagcactggg	ttgtctggtg	aaagattatt	ttccggaacc	ggttaccgtt	480
tcttggaata	gcggtgcact	gaccagcggg	gttcatacct	ttccggcagt	cctgcagagc	540
agcggctctgt	atagcctgtc	tagcgttggt	accgttccga	gcagcagcct	gggcacccag	600
acctatatatt	gcaatgtgaa	tcataaacgg	agcaatacca	aagttgataa	acgcgttgaa	660
ccgaaaagcg	tggacaaaac	tcacacgtgc	ccaccgtgcc	cagcacctga	gttcgagggg	720
ggaccgtcag	tcttcctctt	cccccaaaa	cccaaggaca	ccctcatgat	ctcccggacc	780
cctgaggtca	catgcgtggt	ggtggacgtg	agccacgaag	accctgaggt	caagttcaac	840
tggtacgtgg	acggcgtgga	ggtgcataat	gccaagacaa	agccgcggga	ggagcagtac	900
aacagcacgt	accgtgtggt	cagcgtcctc	accgtcctgc	accaggactg	gctgaatggc	960
aaggagtaca	agtgcaaggt	ctccaacaaa	gccctcccag	ccagcatcga	gaaaaccatc	1020
tccaaagcca	aagggcagcc	ccgagaacca	caggtctaca	ccctgcccc	atgccgggag	1080
gagatgacca	agaaccaggt	cagcctgtgg	tgcttggtca	aaggcttcta	tcccagcgac	1140
atgccgtgg	agtgggagag	caatgggcag	ccggagaaca	actacaagac	cacgcctccc	1200
gtgctggact	ccgacggctc	cttcttcctc	tatagcaagc	tcaccgtgga	caagagcagg	1260
tggcagcagg	ggaacgtctt	ctcatgctcc	gtgatgcatg	aggctctgca	caaccactac	1320
acgcagaaga	gcttaagcct	gtctccgggt	aaatga			1356

<210> 27
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic nucleotide

<400> 27
cagtctgtgc tgactcagcc tccctcagcg tctgggaccc ccgggcagag ggtcaccatc 60
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ccaggaacgg cccccaaact cctcatctat agtcagaatc agcggccctc aggggtccct 180
gaccgattct ctggctcca gtctggcacc tcagcctccc tggccatcag tgggctccag 240
tctgaggatg aggctgatta tttctgtgca gtttgggatg acatcggccg cgtcctgcag 300
ttaggcggag gcacccagct gaccgtccta 330

<210> 28
<211> 651
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic nucleotide

<400> 28
cagtctgtgc tgactcagcc tccctcagcg tctgggaccc ccgggcagag ggtcaccatc 60
tcttgttctg gaagcagctc caatatcgga aggaggcctg taaactggta ccagcagctc 120
ccaggaacgg cccccaaact cctcatctat agtcagaatc agcggccctc aggggtccct 180
gaccgattct ctggctcca gtctggcacc tcagcctccc tggccatcag tgggctccag 240
tctgaggatg aggctgatta tttctgtgca gtttgggatg acatcggccg cgtcctgcag 300
ttaggcggag gcacccagct gaccgtccta ggtcagccca aggcggcccc ctcggtcact 360
ctgttcccg cctgctctga ggagcttcaa gccacaagg ccacactggg gtgtctcata 420
agtgacttct acccgggagc cgtgacagtg gcctggaagg cagatagcag ccccgtaag 480
gcgggagtgg agaccaccac accctccaaa caaagcaaca acaagtacgc ggccagcagc 540

tacctgagcc tgacgcctga gcagtggaag tcccacagaa gctacagctg ccaggtcacg 600
catgaaggga gcaccgtgga gaagacagtg gcccctacag aagtgtcatg a 651

<210> 29
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Epstein Barr virus

<400> 29

Phe Leu Tyr Ala Leu Ala Leu Leu Leu
1 5

<210> 30
<211> 9
<212> PRT
<213> Artificial Sequence

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<400> 30

Cys Leu Gly Gly Leu Leu Thr Met Val
1 5

<210> 31
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<400> 31

Gly Leu Cys Thr Leu Val Ala Met Leu
1 5

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1 5

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Phe Met Tyr Ser Asp Phe His Phe Ile
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<400> 34

Asn Leu Val Pro Met Val Ala Thr Val
1 5