

Sequence_Listing
SEQUENCE LISTING

<110> MORPHOTEK, INC.

<120> METHODS FOR TREATING LUNG CANCER

<130> 104018.000950

<140>

<141>

<150> 62/149,184

<151> 2015-04-17

<160> 46

<170> PatentIn version 3.5

<210> 1

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 1

Gly Phe Thr Phe Ser Gly Tyr Gly Leu Ser

1 5 10

<210> 2

<211> 17

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<213> Artificial Sequence

<220>

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

<400> 2

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

1 5 10 15

Sequence_Listing

Gly

<210> 3
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<220>
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 His Gly Asp Asp Pro Ala Trp Phe Ala Tyr
 1 5 10

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<220>
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 Ser Val Ser Ser Ser Ile Ser Ser Asn Asn Leu His
 1 5 10

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

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 Gly Thr Ser Asn Leu Ala Ser
 1 5

Sequence_Listing

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

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 Gln Gln Trp Ser Ser Tyr Pro Tyr Met Tyr Thr
 1 5 10

<210> 7
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<220>
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<400> 7
 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 Ser Val Ser Ser Ser Ile Ser Ser Asn
 20 25 30

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

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

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln
 65 70 75 80

Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro

Sequence_Listing

85

90

95

Tyr Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr
 100 105 110

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu
 115 120 125

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

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
 145 150 155 160

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

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

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

Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 8

<211> 449

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<220>

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

<400> 8

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

Sequence_Listing

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

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

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

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

Leu Gln Met Asp Ser Leu Arg Pro Glu Asp Thr Gly Val Tyr Phe Cys
85 90 95

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

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

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

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

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

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

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

Sequence_Listing

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

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro
225 230 235 240

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

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

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

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

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

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

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

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

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

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

Sequence_Listing

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

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
420 425 430

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

Lys

<210> 9
<211> 962
<212> DNA
<213> Homo sapiens

<400> 9
tcaagggttaa acgacaagga cagacatggc tcagcggatg acaacacagc tgctgctcct 60
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gcttctcaat gtctgcatga acgccaagca ccacaaggaa aagccaggcc ccgaggacaa 180
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ggcacctgcc tgcaaacggc atttcatcca ggacacctgc ctctacgagt gctcccccaa 360
cttggggccc tggatccagc aggtggatca gagctggcgc aaagagcggg tactgaacgt 420
gcccctgtgc aaagaggact gtgagcaatg gtgggaagat tgctgcacct cctacacctg 480
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agctgcctgc caacctttcc atttctactt cccacacccc actgttctgt gcaatgaaat 600
ctggactcac tcctacaagg tcagcaacta cagccgaggg agtggccgct gcatccagat 660
gtggttcgac ccagcccagg gcaaccccaa tgaggagggtg gcgaggttct atgctgcagc 720

Sequence_Listing

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cagccccaca gctcccaact atttggttcc tgctccatgg tcgggcctct gacagccact 900
ttgaataaac cagacaccgc acatgtgtct tgagaattat ttggaaaaaa aaaaaaaaaa 960
aa 962
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<210> 10
 <211> 257
 <212> PRT
 <213> Homo sapiens

<400> 10
 Met Ala Gln Arg Met Thr Thr Gln Leu Leu Leu Leu Val Trp Val
 1 5 10 15

Ala Val Val Gly Glu Ala Gln Thr Arg Ile Ala Trp Ala Arg Thr Glu
 20 25 30

Leu Leu Asn Val Cys Met Asn Ala Lys His His Lys Glu Lys Pro Gly
 35 40 45

Pro Glu Asp Lys Leu His Glu Gln Cys Arg Pro Trp Arg Lys Asn Ala
 50 55 60

Cys Cys Ser Thr Asn Thr Ser Gln Glu Ala His Lys Asp Val Ser Tyr
 65 70 75 80

Leu Tyr Arg Phe Asn Trp Asn His Cys Gly Glu Met Ala Pro Ala Cys
 85 90 95

Lys Arg His Phe Ile Gln Asp Thr Cys Leu Tyr Glu Cys Ser Pro Asn
 100 105 110

Leu Gly Pro Trp Ile Gln Gln Val Asp Gln Ser Trp Arg Lys Glu Arg
 115 120 125

Sequence_Listing

Val Leu Asn Val Pro Leu Cys Lys Glu Asp Cys Glu Gln Trp Trp Glu
130 135 140

Asp Cys Arg Thr Ser Tyr Thr Cys Lys Ser Asn Trp His Lys Gly Trp
145 150 155 160

Asn Trp Thr Ser Gly Phe Asn Lys Cys Ala Val Gly Ala Ala Cys Gln
165 170 175

Pro Phe His Phe Tyr Phe Pro Thr Pro Thr Val Leu Cys Asn Glu Ile
180 185 190

Trp Thr His Ser Tyr Lys Val Ser Asn Tyr Ser Arg Gly Ser Gly Arg
195 200 205

Cys Ile Gln Met Trp Phe Asp Pro Ala Gln Gly Asn Pro Asn Glu Glu
210 215 220

Val Ala Arg Phe Tyr Ala Ala Ala Met Ser Gly Ala Gly Pro Trp Ala
225 230 235 240

Ala Trp Pro Phe Leu Leu Ser Leu Ala Leu Met Leu Leu Trp Leu Leu
245 250 255

Ser

<210> 11

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<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

Sequence_Listing

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Any amino acid

<220>

<221> MOD_RES

<222> (6)..(6)

<223> Any amino acid

<400> 11

Gln Val Xaa Leu Gln Xaa Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
1 5 10 15

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

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

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

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

Leu Gln Met Ser Ser Leu Lys Ser Asp Asp Thr Ala Ile Tyr Ile Cys
85 90 95

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

Thr Leu Val Thr Val Ser Ala
115

<210> 12

<211> 110

<212> PRT

<213> Artificial Sequence

Sequence_Listing

<220>

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

<400> 12

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

Glu Lys Val Thr Ile Thr Cys Ser Val Ser Ser Ser Ile Ser Ser Asn
20 25 30

Asn Leu His Trp Tyr Gln Gln Lys Ser Glu Thr Ser Pro Lys Pro Trp
35 40 45

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

Gly Phe Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu
65 70 75 80

Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro
85 90 95

Tyr Met Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 13

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<210> 14

<211> 5

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Sequence_Listing

peptide"

<400> 14

Gly Tyr Phe Met Asn
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<210> 15

<211> 17

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<400> 15

Arg Ile Phe Pro Tyr Asn Gly Asp Thr Phe Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 16

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<212> PRT

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 16

Gly Thr His Tyr Phe Asp Tyr
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<210> 17

<211> 11

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Sequence_Listing

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

<400> 17

Arg Thr Ser Glu Asn Ile Phe Ser Tyr Leu Ala
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<210> 18

<211> 7

<212> PRT

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

<400> 18

Asn Ala Lys Thr Leu Ala Glu
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<210> 19

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

<400> 19

Gln His His Tyr Ala Phe Pro Trp Thr
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<210> 20

<211> 5

<212> PRT

<213> Artificial Sequence

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

Sequence_Listing

<400> 20

His Pro Tyr Met His

1 5

<210> 21

<211> 17

<212> PRT

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

<400> 21

Arg Ile Asp Pro Ala Asn Gly Asn Thr Lys Tyr Asp Pro Lys Phe Gln

1 5 10 15

Gly

<210> 22

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 22

Glu Glu Val Ala Asp Tyr Thr Met Asp Tyr

1 5 10

<210> 23

<211> 15

<212> PRT

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

Sequence_Listing

<400> 23

Arg Ala Ser Glu Ser Val Asp Thr Tyr Gly Asn Asn Phe Ile His
1 5 10 15

<210> 24

<211> 7

<212> PRT

<213> Artificial Sequence

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<400> 24

Leu Ala Ser Asn Leu Glu Ser
1 5

<210> 25

<211> 9

<212> PRT

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

<400> 25

Gln Gln Asn Asn Gly Asp Pro Trp Thr
1 5

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<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 26

Ser Gly Tyr Tyr Trp Asn

Sequence_Listing

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<210> 27

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<212> PRT

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

<400> 27

Tyr Ile Lys Ser Asp Gly Ser Asn Asn Tyr Asn Pro Ser Leu Lys Asn
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<210> 28

<211> 7

<212> PRT

<213> Artificial Sequence

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

<400> 28

Glu Trp Lys Ala Met Asp Tyr
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<210> 29

<211> 12

<212> PRT

<213> Artificial Sequence

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

<400> 29

Arg Ala Ser Ser Thr Val Ser Tyr Ser Tyr Leu His
1 5 10

Sequence_Listing

<210> 30

<211> 7

<212> PRT

<213> Artificial Sequence

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

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Gly Thr Ser Asn Leu Ala Ser

1 5

<210> 31

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

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

<400> 31

Gln Gln Tyr Ser Gly Tyr Pro Leu Thr

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<210> 32

<211> 5

<212> PRT

<213> Artificial Sequence

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

<400> 32

Ser Tyr Ala Met Ser

1 5

<210> 33

<211> 17

<212> PRT

Sequence_Listing

<213> Artificial Sequence

<220>

<221> source

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

<400> 33

Glu Ile Gly Ser Gly Gly Ser Tyr Thr Tyr Tyr Pro Asp Thr Val Thr
1 5 10 15

Gly

<210> 34

<211> 9

<212> PRT

<213> Artificial Sequence

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<400> 34

Glu Thr Thr Ala Gly Tyr Phe Asp Tyr
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<210> 35

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<220>

<221> source

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

<400> 35

Ser Ala Ser Gln Gly Ile Asn Asn Phe Leu Asn
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<210> 36

<211> 7

Sequence_Listing

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 36

Tyr Thr Ser Ser Leu His Ser
1 5

<210> 37

<211> 9

<212> PRT

<213> Artificial Sequence

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

<400> 37

Gln His Phe Ser Lys Leu Pro Trp Thr
1 5

<210> 38

<211> 110

<212> PRT

<213> Artificial Sequence

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<221> source

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

<400> 38

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 Ser Val Ser Ser Ser Ile Ser Ser Asn
20 25 30

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

Sequence_Listing

35

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45

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

Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln
65 70 75 80

Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro
85 90 95

Tyr Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 39

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 39

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 Ser Val Ser Ser Ser Ile Ser Ser Asn
20 25 30

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

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

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln
65 70 75 80

Sequence_Listing

Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro
85 90 95

Tyr Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 40

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 40

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 Ser Val Ser Ser Ser Ile Ser Ser Asn
20 25 30

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

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

Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln
65 70 75 80

Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro
85 90 95

Tyr Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

Sequence_Listing

<210> 41

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

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

<400> 41

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 Ser Val Ser Ser Ser Ile Ser Ser Asn
20 25 30

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

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

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln
65 70 75 80

Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro
85 90 95

Tyr Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 42

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

Sequence_Listing

polypeptide"

<400> 42

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

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

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

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

Lys Gly Arg Val Thr Met Leu Arg Asp Thr Ser Lys Asn Gln Phe Ser
65 70 75 80

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

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

Ser Leu Val Thr Val Ser Ser
115

<210> 43

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 43

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

Sequence_Listing

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

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

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

Lys Gly Arg Phe Ala Ile Ser Arg Asp Asn Ser Lys Asn Gln Phe Ser
65 70 75 80

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

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

Ser Leu Val Thr Val Ser Ser
115

<210> 44

<211> 119

<212> PRT

<213> Artificial Sequence

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<400> 44

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

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

Sequence_Listing

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

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

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

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

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

Thr Thr Val Thr Val Ser Ser
115

<210> 45

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

<400> 45

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

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

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

Sequence_Listing

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

Lys Gly Arg Val Thr Met Leu Arg Asp Thr Ser Lys Asn Gln Phe Ser
65 70 75 80

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

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

Ser Leu Val Thr Val Ser Ser
115

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<400> 46
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 Ser Ala Ser Gly Phe Thr Phe Ser Gly Tyr
20 25 30

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

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

Lys Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Phe

Sequence_Listing

65

70

75

80

Leu Gln Met Asp Ser Leu Arg Pro Glu Asp Thr Gly Val Tyr Phe Cys
85 90 95

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

Thr Pro Val Thr Val Ser Ser
115