

SEQUENCE LISTING

<110> LEGOCHEM BIOSCIENCES

<120> COMPOSITIONS AND METHODS RELATED TO ANTI-CD19 ANTIBODY DRUG CONJUGATES

<130> LCH-00925 (33138.00925)

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<150> 62/669,183

<151> 2018-05-09

<160> 51

<170> PatentIn version 3.5

<210> 1

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 1

gaggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc ccggggagtc tctgaagatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg	120
cccgggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac	180
agcccgtcct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac	240
cttcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gagaggtata	300
agtgggatct acaatttaca cggttttgat atctggggcc agggaaccct ggtcacagtc	360
tcgagc	366

<210> 2

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 2

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

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

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

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Ile Ser Gly Ile Tyr Asn Leu His Gly Phe Asp Ile Trp
100 105 110

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

<210> 3

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 3

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120

gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca	180
aggttcagtg gcagtggatc tgggacagat ttactctca ccatcagcag tctgcaacct	240
gaagattttg caacttacta ctgtcagcag gcgagcttgg acagcccgtt gaccttcggc	300
caagggacca aggtggaaat caaa	324

<210> 4
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 4
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
 20 25 30

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

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 5
 <211> 366
 <212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 5

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gaggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc ccggggagtc tctgaagatc      60
tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg      120
cccgaggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac      180
agcccgctcct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac      240
cttcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gagaggtgta      300
agtgggatct acaatttaca cggttttgat atctggggcc agggaaccct ggtcacagtc      360
tcgagc                                         366
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<210> 6

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 6

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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1           5           10          15

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

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

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50          55          60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65          70          75          80
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Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Gly Val Ser Gly Ile Tyr Asn Leu His Gly Phe Asp Ile Trp
100 105 110

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

<210> 7

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 7

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc	60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca	120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca	180
aggttcagtg gcagtggatc tgggacagat ttactctca ccatcagcag tctgcaacct	240
gaagattttg caacttacta ctgtcagcag ggcatgtggg acaaccggtt caccttcggc	300
caagggacca aggtggaaat caaa	324

<210> 8

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 8

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

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
20 25 30

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

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Met Trp Asp Asn Pro
85 90 95

Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 9

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 9

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc	60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca	120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca	180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct	240
gaagattttg caacttacta ctgtcagcag ggcagggttcg ggtccccgtt caccttcggc	300
caagggacca aggtggaaat caaa	324

<210> 10

<211> 108

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polypeptide

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

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
20 25 30

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

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Arg Phe Gly Ser Pro
85 90 95

Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 11
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 11
gaggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc ccgggggagtc tctgaagatc 60
tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg 120

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cccggaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac 180
agcccgctct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac 240
cttcagtgga gcagcctgaa ggccctcggac accgccatgt attactgtgc gagagtctgg 300
tattacgatt tttggagtgg ggccgatgct tttgatatct ggggccaggg aaccctggtc 360
acagtctcga gc 372

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<210> 12
 <211> 124
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 12
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

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

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

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Val Trp Tyr Tyr Asp Phe Trp Ser Gly Ala Asp Ala Phe Asp
 100 105 110

Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

115

120

<210> 13

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 13

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gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc      60
ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcagaaacct      120
ggccaggctc ccaggctcct catctatggg gcatccacca gggccactgg tatcccagcc      180
aggttcagtg gcagtggggtc tgggacagag ttcactctca ccatcagcag cctgcagtct      240
gaagattttg cagtttatta ctgtcagcag ggcagcttgg aggcgccgca gaccttcggc      300
caagggacca aggtggaaat caaa                                           324

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<210> 14

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 14

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

```

```

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
          20          25          30

```

```

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
          35          40          45

```

```

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

```

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

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

Gln Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 15

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 15

gaggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc ccgggggagtc tctgaagatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg	120
cccgggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac	180
agcccgtcct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac	240
ctgcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gagaggtgat	300
tattggactg gttttgctta ttggggccag ggaaccctgg tcacagtctc gagc	354

<210> 16

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 16

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu	
1 5 10 15	

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

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

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Asp Tyr Trp Thr Gly Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 17
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polynucleotide

<400> 17
cagtctgtgt tgacgcagcc gccctcagtg tctgcggccc caggacagaa ggtcaccatc 60
tcctgctctg gaagcagctc caacattggg aataattatg tatcctggta ccagcagctc 120
ccaggaacag cccccaaact cctcatTTat gacaataata agcgaccctc agggattcct 180
gaccgattct ctggctccaa gtctggcacg tcagccaccc tgggcatcac cggactccag 240
actggggacg aggccgatta ttactgcgga acatgggatc tgggctggaa ctcggtgttc 300
ggcggaggga ccaagctgac cgtccta 327

<210> 18
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 18
Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
1 5 10 15

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

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

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

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

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Leu Gly Trp
85 90 95

Asn Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 19
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 19

caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
 tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
 cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180
 gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagagatcgg 300
 gggtatgatt acgtttgggg gagttatcgt tatgggtgcct ttgatatctg gggccaggga 360
 accctgggtca cagtctcgag c 381

<210> 20
 <211> 127
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polypeptide

<400> 20
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15

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

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

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Arg Gly Tyr Asp Tyr Val Trp Gly Ser Tyr Arg Tyr Gly

100

105

110

Ala Phe Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 21

<211> 333

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polynucleotide

<400> 21

cagtctgccc tgactcagcc tgcctccgtg tctgggtctc ctggacagtc gatcaccatc 60
 tcctgcactg gaaccagcag tgacgttggt ggttataact atgtctcctg gtaccaacag 120
 caccaggca aagccccaa actcatgatt tatgaggctca gtaatcggcc ctgaggggtt 180
 tctaatacgt tctctggctc caagtctggc aacacggcct ccctgaccat ctctgggctc 240
 caggctgagg acgaggctga ttattactgc agctcatatg atgtctgggt ccgcacatg 300
 gtgttcggcg gagggaccaa gctgaccgtc cta 333

<210> 22

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 polypeptide

<400> 22

Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

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

Met Ile Tyr Glu Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
50 55 60

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

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

Val Pro His Met Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 23

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 23

Gly Tyr Ser Phe Thr Ser Tyr Trp
1 5

<210> 24

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 24

Ile Tyr Pro Gly Asp Ser Asp Thr
1 5

<210> 25

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 25

Ala	Arg	Gly	Ile	Ser	Gly	Ile	Tyr	Asn	Leu	His	Gly	Phe	Asp	Ile
1				5				10					15	

<210> 26

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 26

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

<210> 27

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 27

Ala	Arg	Val	Trp	Tyr	Tyr	Asp	Phe	Trp	Ser	Gly	Ala	Asp	Ala	Phe	Asp
1				5				10					15		

Ile

<210> 28

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 28

Ala Arg Gly Asp Tyr Trp Thr Gly Phe Ala Tyr
1 5 10

<210> 29

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 29

Gly Gly Thr Phe Ser Ser Tyr Ala
1 5

<210> 30

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 30

Ile Ile Pro Ile Phe Gly Thr Ala
1 5

<210> 31

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 31

Ala Arg Asp Arg Gly Tyr Asp Tyr Val Trp Gly Ser Tyr Arg Tyr Gly
1 5 10 15

Ala Phe Asp Ile
20

<210> 32
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 32
Gln Ser Ile Ser Ser Tyr
1 5

<210> 33
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 33
Ala Ala Ser
1

<210> 34
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 34
Gln Gln Ala Ser Leu Asp Ser Pro Leu Thr
1 5 10

<210> 35
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 35

Gln Gln Gly Met Trp Asp Asn Pro Phe Thr
1 5 10

<210> 36

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 36

Gln Gln Gly Arg Phe Gly Ser Pro Phe Thr
1 5 10

<210> 37

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 37

Gln Ser Val Ser Ser Asn
1 5

<210> 38

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 38

Gly Ala Ser
1

<210> 39
 <211> 366
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic polynucleotide

<400> 39
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 tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg 120
 cccgggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac 180
 agccccgtcct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac 240
 cttcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gagagggtgta 300
 agtgggatct acaatttaca cggtttcgat atctggggcc aggggaaccct ggtcacagtc 360
 tcgagc 366

<210> 40
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 40
 Gln Gln Gly Ser Leu Glu Ala Pro Gln Thr
 1 5 10

<210> 41
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 41
 Ser Ser Asn Ile Gly Asn Asn Tyr

1

5

<210> 42

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 42

Asp Asn Asn

1

<210> 43

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 43

Gly Thr Trp Asp Leu Gly Trp Asn Ser Val

1

5

10

<210> 44

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 44

Ser Ser Asp Val Gly Gly Tyr Asn Tyr

1

5

<210> 45

<211> 3

<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 45
Glu Val Ser
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<210> 46
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 46
Ser Ser Tyr Asp Val Trp Val Pro His Met Val
1 5 10

<210> 47
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 47
Cys Val Ile Met
1

<210> 48
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 48
Cys Val Leu Leu
1

<210> 49
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 49
Gly Gly Gly Gly Gly Gly Gly Cys Val Ile Met
1 5 10

<210> 50
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<220>
<221> MISC_FEATURE
<222> (1)..(20)
<223> This region may encompass 0-20 residues

<400> 50
Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
1 5 10 15

Gly Gly Gly Gly Cys Val Ile Met
20

<210> 51
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MISC_FEATURE

<222> (1)..(20)

<223> This region may encompass 0-20 residues

<400> 51

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
1 5 10 15

Gly Gly Gly Gly Cys Val Leu Leu
20