

SEQUENCE LISTING

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<120> Novel antiproliferation antibodies

<130> D24958

<150> FR0610329

<151> 2006-11-24

<160> 64

<170> PatentIn version 3.3

<210> 1

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<212> PRT

<213> mus musculus

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Gln Asp Ile Asn Asn Tyr
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<213> mus musculus

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Thr Asp Tyr Ser
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<211> 3

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<213> mus musculus

<400> 3

Tyr Thr Ser
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<212> PRT

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Ile Asp Pro Tyr Asn Gly Gly Thr

1 5

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Leu Gln Tyr Asp Asn Leu Trp Thr
 1 5

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Gln Thr Asp Tyr Phe Asp Tyr
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Gly Tyr Ser Phe Thr Asp Tyr Ser
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<400> 8

Lys Ala Ser Gln Asp Ile Asn Asn Tyr Ile Ala
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<400> 9

Thr Asp Tyr Ser Met Tyr
 1 5

<210> 10
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<400> 10

Tyr Thr Ser Thr Leu Gln Ala
1 5

<210> 11

<211> 17

<212> PRT

<213> mus musculus

<400> 11

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

<210> 12

<211> 9

<212> PRT

<213> mus musculus

<400> 12

Ala Arg Gln Thr Asp Tyr Phe Asp Tyr
1 5

<210> 13

<211> 106

<212> PRT

<213> mus musculus

<400> 13

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15
Gly Lys Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Ile Asn Asn Tyr
20 25 30
Ile Ala Trp Tyr Gln His Lys Pro Gly Lys Gly Pro Arg Leu Leu Ile
35 40 45
His Tyr Thr Ser Thr Leu Gln Ala Gly Ile Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Arg Asp Tyr Ser Phe Ser Ile Ser Asn Leu Glu Pro
65 70 75 80
Glu Asp Ile Gly Thr Tyr Tyr Cys Leu Gln Tyr Asp Asn Leu Trp Thr
85 90 95
Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 14

<211> 116

<212> PRT

<213> mus musculus

<400> 14

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Glu Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Asp Tyr
      20      25      30
Ser Met Tyr Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
      35      40      45
Gly Tyr Ile Asp Pro Tyr Asn Gly Gly Thr Arg Tyr Asn Gln Lys Phe
50      55      60
Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Phe
65      70      75      80
Met His Leu Asn Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
      85      90      95
Ala Arg Gln Thr Asp Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu
      100      105      110
Thr Val Ser Ser
      115

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<210> 15
<211> 215
<212> PRT
<213> mus musculus

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<400> 15

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1      5      10      15
Gly Lys Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Ile Asn Asn Tyr
      20      25      30
Ile Ala Trp Tyr Gln His Lys Pro Gly Lys Gly Pro Arg Leu Leu Ile
      35      40      45
His Tyr Thr Ser Thr Leu Gln Ala Gly Ile Pro Ser Arg Phe Ser Gly
50      55      60
Ser Gly Ser Gly Arg Asp Tyr Ser Phe Ser Ile Ser Asn Leu Glu Pro
65      70      75      80
Glu Asp Ile Gly Thr Tyr Tyr Cys Leu Gln Tyr Asp Asn Leu Trp Thr
      85      90      95
Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Ala Asp Ala Ala Pro
100      105      110
Thr Val Ser Ile Phe Pro Pro Ser Ser Glu Gln Leu Thr Ser Gly Gly
115      120      125
Ala Ser Val Val Cys Phe Leu Asn Asn Phe Tyr Pro Lys Asp Ile Asn
130      135      140
Val Lys Trp Lys Ile Asp Gly Ser Glu Arg Gln Asn Gly Val Leu Asn
145      150      155      160
Ser Trp Thr Asp Gln Asp Ser Lys Asp Ser Thr Tyr Ser Met Ser Ser
165      170      175
Thr Leu Thr Leu Thr Lys Asp Glu Tyr Glu Arg His Asn Ser Tyr Thr
180      185      190
Cys Glu Ala Thr His Lys Thr Ser Thr Ser Pro Ile Val Lys Ser Phe
195      200      205
Asn Arg Asn Glu Cys Asn His
210      215

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<210> 16
<211> 440
<212> PRT
<213> mus musculus

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<400> 16

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Glu Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1      5      10      15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Asp Tyr
20      25      30
Ser Met Tyr Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
35      40      45
Gly Tyr Ile Asp Pro Tyr Asn Gly Gly Thr Arg Tyr Asn Gln Lys Phe
50      55      60
Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Phe
65      70      75      80
Met His Leu Asn Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85      90      95
Ala Arg Gln Thr Asp Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu
100     105     110
Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala
115     120     125
Pro Gly Ser Ala Ala Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu
130     135     140
Val Lys Gly Tyr Phe Pro Glu Pro Val Thr Val Thr Trp Asn Ser Gly
145     150     155     160
Ser Leu Ser Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Asp
165     170     175
Leu Tyr Thr Leu Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro
180     185     190
Ser Glu Thr Val Thr Cys Asn Val Ala His Pro Ala Ser Ser Thr Lys
195     200     205
Val Asp Lys Lys Ile Val Pro Arg Asp Cys Gly Cys Lys Pro Cys Ile
210     215     220
Cys Thr Val Pro Glu Val Ser Ser Val Phe Ile Phe Pro Pro Lys Pro
225     230     235     240
Lys Asp Val Leu Thr Ile Thr Leu Thr Pro Lys Val Thr Cys Val Val
245     250     255
Val Asp Ile Ser Lys Asp Asp Pro Glu Val Gln Phe Ser Trp Phe Val
260     265     270
Asp Asp Val Glu Val His Thr Ala Gln Thr Gln Pro Arg Glu Glu Gln
275     280     285
Phe Asn Ser Thr Phe Arg Ser Val Ser Glu Leu Pro Ile Met His Gln
290     295     300
Asp Trp Leu Asn Gly Lys Glu Phe Lys Cys Arg Val Asn Ser Ala Ala
305     310     315     320
Phe Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Arg Pro
325     330     335
Lys Ala Pro Gln Val Tyr Thr Ile Pro Pro Pro Lys Glu Gln Met Ala
340     345     350
Lys Asp Lys Val Ser Leu Thr Cys Met Ile Thr Asp Phe Phe Pro Glu
355     360     365
Asp Ile Thr Val Glu Trp Gln Trp Asn Gly Gln Pro Ala Glu Asn Tyr
370     375     380
Lys Asn Thr Gln Pro Ile Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr
385     390     395     400
Ser Lys Leu Asn Val Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe
405     410     415
Thr Cys Ser Val Leu His Glu Gly Leu His Asn His His Thr Glu Lys
420     425     430
Ser Leu Ser His Ser Pro Gly Lys
435     440

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<210> 17

<211> 106
 <212> PRT
 <213> mus musculus

<400> 17

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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 Gln Ala Ser Gln Asp Ile Asn Asn Tyr
          20           25           30
Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
          35           40           45
His Tyr Thr Ser Thr Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
          50           55           60
Ser Gly Ser Gly Thr Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln Pro
65           70           75           80
Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp Asn Leu Trp Thr
          85           90           95
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
          100           105

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<210> 18
 <211> 116
 <212> PRT
 <213> mus musculus

<400> 18

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Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1           5           10           15
Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Ser Phe Thr Asp Tyr
          20           25           30
Ser Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
          35           40           45
Gly Tyr Ile Asp Pro Tyr Asn Gly Gly Thr Arg Tyr Ala Glu Lys Phe
          50           55           60
Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asp 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 Gln Thr Asp Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
          100           105           110
Thr Val Ser Ser
          115

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<210> 19
 <211> 116
 <212> PRT
 <213> mus musculus

<400> 19

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Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1           5           10           15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Asp Tyr
          20           25           30
Ser Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
          35           40           45
Gly Tyr Ile Asp Pro Tyr Asn Gly Gly Thr Arg Tyr Ser Gln Lys Phe

```

50		55		60
Gln Gly Arg Val Thr	Ile Thr Ala Asp Thr	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 Gln Thr Asp	Tyr Phe Asp Tyr Trp	Gly Gln Gly Thr	Leu Val	
	100	105	110	
Thr Val Ser Ser				
	115			

<210> 20
 <211> 18
 <212> DNA
 <213> mus musculus

<400> 20
 caagacatta acaattat 18

<210> 21
 <211> 12
 <212> DNA
 <213> mus musculus

<400> 21
 actgactaca gc 12

<210> 22
 <211> 9
 <212> DNA
 <213> mus musculus

<400> 22
 tacacatct 9

<210> 23
 <211> 24
 <212> DNA
 <213> mus musculus

<400> 23
 attgatacctt acaatggtgg tact 24

<210> 24
 <211> 24
 <212> DNA
 <213> mus musculus

<400> 24
 ctacagtatg ataatctgtg gacg 24

<210> 25

<211> 21
 <212> DNA
 <213> mus musculus

<400> 25

cagacggact actttgacta c 21

<210> 26
 <211> 24
 <212> DNA
 <213> mus musculus

<400> 26

ggttactcat tcaactgacta cagc 24

<210> 27
 <211> 27
 <212> DNA
 <213> mus musculus

<400> 27

gcaagacaga cggactactt tgactac 27

<210> 28
 <211> 33
 <212> DNA
 <213> mus musculus

<400> 28

aaggcaagcc aagacattaa caattatata gct 33

<210> 29
 <211> 21
 <212> DNA
 <213> mus musculus

<400> 29

tacacatcta cattacaagc a 21

<210> 30
 <211> 18
 <212> DNA
 <213> mus musculus

<400> 30

actgactaca gcatgtac 18

<210> 31
 <211> 51

<212> DNA

<213> mus musculus

<400> 31

tatattgatc cttacaatgg tggtagtagg tacaaccaga agttcaaggg c 51

<210> 32

<211> 318

<212> DNA

<213> mus musculus

<400> 32

gacatccaga	tgacacagtc	tccatcctca	ctgtctgcat	ctctgggagg	caaagtcacc	60
atcacttgca	aggcaagcca	agacattaac	aattatatag	cttggtacca	acacaagcct	120
ggaaaaggtc	ctaggctgct	catacattac	acatctacat	tacaagcagg	catcccatca	180
aggttcagtg	gaagtgggtc	tgggagagat	tattccttca	gcatcagcaa	cctggagcct	240
gaagatattg	gaacttatta	ttgtctacag	tatgataatc	tgtggacggt	cggtggaggc	300
accaagctgg	aatcaaaa					318

<210> 33

<211> 348

<212> DNA

<213> mus musculus

<400> 33

gagatccagc	tgacacagtc	tggacctgag	ctgggtgaagc	ctggggcttc	agtgaaggta	60
tcttgcaagg	cttctgggta	ctcattcact	gactacagca	tgtactgggt	gaagcagagc	120
catggaaaga	gccttgagtg	gattggatat	attgatacct	acaatgggtg	tactaggtac	180
aaccagaagt	tcaagggcaa	ggccacattg	actgttgaca	agtcctccag	cacagccttc	240
atgcatctca	acagcctgac	atctgaggac	tctgcagtct	attactgtgc	aagacagagc	300
gactactttg	actactgggg	ccaaggcacc	actctcacag	tctcctca		348

<210> 34

<211> 639

<212> DNA

<213> mus musculus

<400> 34

gacatccaga	tgacacagtc	tccatcctca	ctgtctgcat	ctctgggagg	caaagtcacc	60
atcacttgca	aggcaagcca	agacattaac	aattatatag	cttggtacca	acacaagcct	120
ggaaaaggtc	ctaggctgct	catacattac	acatctacat	tacaagcagg	catcccatca	180
aggttcagtg	gaagtgggtc	tgggagagat	tattccttca	gcatcagcaa	cctggagcct	240
gaagatattg	gaacttatta	ttgtctacag	tatgataatc	tgtggacggt	cggtggaggc	300
accaagctgg	aatcaaaacg	ggctgatgct	gcaccaactg	tatccatctt	cccaccatcc	360
agtgagcagt	taacatctgg	aggcgctca	gtcgtgtgct	tcttgaacaa	cttctacccc	420
aaagacatca	atgtcaagtg	gaagattgat	ggcagtgaac	gacaaaatgg	cgtcctgaac	480
agttggactg	atcaggacag	caaagacagc	acctacagca	tgagcagcac	cctcacgttg	540
accaaggacg	agtatgaacg	acataacagc	tatacctgtg	aggccactca	caagacatca	600
acttcaccca	ttgtcaagag	cttcaacagc	aatgagtgt			639

<210> 35

<211> 1320

<212> DNA

<213> mus musculus

<400> 35

gagatccagc	tgcagcagtc	tggacctgag	ctgggtgaagc	ctgggggcttc	agtgaaggta	60
tcctgcaagg	cttctgggta	ctcattcact	gactacagca	tgtactgggt	gaagcagagc	120
catggaaaga	gccttgagtg	gattggatat	attgatacctt	acaatgggtg	tactaggtac	180
aaccagaagt	tcaagggcaa	ggccacattg	actgttgaca	agtcctccag	cacagccttc	240
atgcatctca	acagcctgac	atctgaggac	tctgcagtct	attactgtgc	aagacagacg	300
gactactttg	actactgggg	ccaaggcacc	actctcacag	tctcctcagc	caaaacaaca	360
gccccatcgg	tctatccact	ggcccttgga	tctgctgccc	aaactaactc	catggtgacc	420
ctgggatgcc	tggteaaggg	ctatttccct	gagccagtga	cagtgcacctg	gaactctgga	480
tccctgtcca	gcgggtgtgca	caccttccca	gctgtcctgc	agtctgacct	ctacactctg	540
agcagctcag	tgactgtccc	ctccagcacc	tggcccagcg	agaccgtcac	ctgcaacgtt	600
gcccaccg	ccagcagcac	caaggtggac	aagaaaattg	tgcccaggga	ttgtggttgt	660
aagccttgca	tatgtacagt	cccagaagta	tcatctgtct	tcatcttccc	cccaaagccc	720
aaggatgtgc	tcaccattac	tctgactcct	aaggtcacgt	gtgttggtgt	agacatcagc	780
aaggatgatc	ccgaggtcca	gttcagctgg	tttgtagatg	atgtggaggt	gcacacagct	840
cagacgcaac	cccgggagga	gcagttcaac	agcactttcc	gctcagtcag	tgaacttccc	900
atcatgcacc	aggactggct	caatggcaag	gagttcaa	gcagggtcaa	cagtgcagct	960
ttccctgccc	ccatcgagaa	aaccatctcc	aaaaccaaag	gcagaccgaa	ggctccacag	1020
gtgtacacca	ttccacctcc	caaggagcag	atggccaagg	ataaagtcag	tctgacctgc	1080
atgataacag	acttcttccc	tgaagacatt	actgtggagt	ggcagtgga	tgggcagcca	1140
gcggagaact	acaagaacac	tcagcccatc	atggacacag	atggctctta	cttcgtctac	1200
agcaagctca	atgtgcagaa	gagcaactgg	gaggcaggaa	atactttcac	ctgctctgtg	1260
ttacatgagg	gcctgcacaa	ccaccatact	gagaagagcc	tctcccactc	tcctggtaaa	1320

<210> 36

<211> 318

<212> DNA

<213> mus musculus

<400> 36

gacatacaga	tgactcagag	cccatcatca	ttgagcgcg	ctgtcggcga	tcgggttacc	60
attacctgcc	aggcaagtca	agatatcaac	aactatattg	cttggtatca	acagaagccc	120
ggtaaagccc	caaagctgct	gatacactac	acctccaccc	tggagaccgg	cgtgccttct	180
agattttctg	gaagcgggctc	cggaaaccgat	tatacgttca	caatctccag	ccttcagccc	240
gaagacatcg	ccacatacta	ctgtctgcaa	tacgacaatc	tgtggacatt	tggccagggg	300
actaaggtgg	agatcaaa					318

<210> 37

<211> 345

<212> DNA

<213> mus musculus

<400> 37

gaagtgcagc	tggttcagag	cggcgccgag	gtaaaaccag	gggcgacgg	gaagataagc	60
tgcaaggtga	gtgggtactc	attcaccgac	tattcaatgc	actgggtcca	acaggcccct	120
ggtaaaggac	tggagtggat	gggatacatc	gatccctaca	atggaggcac	taggtacgcc	180
gagaagttcc	aggggagagt	cactattacc	gcagatactt	ctaccgatac	tgcctacatg	240
gaactcagca	gtctgcggctc	cgaggacaca	gcagtctact	attgtgctcg	ccaaacagac	300
tattttgact	attggggcca	gggaaccttg	gtgacagtgt	cctct		345

<210> 38

<211> 348

<212> DNA

<213> mus musculus

<400> 38

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caggtgcaat tggtagacgtc aggcgcggag gtgaagaagc ctgggggctag tgttaaagtc      60
tcctgtaaaag cctccggata ttccttcact gactactcta tgcattgggt tgcgccaggca      120
ccagggcagc ggctggaatg gatgggttac attgatccct acaacggagg cacgcgatat      180
agtcagaagt tccaggggtcg ggtgacaatc acagccgata cgtccaccag caccgcctac      240
atggagttga gcagtctcag gtcagaagac acagccgtgt actattgcgc aagacagacc      300
gattatttcg actactgggg ccaaggcact ctcgtgaccg tctctagc      348

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<210> 39

<211> 115

<212> PRT

<213> mus musculus

<400> 39

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Met Arg Pro Ser Ile Gln Phe Leu Gly Leu Leu Leu Phe Trp Leu His
1           5           10           15
Gly Ala Gln Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
          20           25           30
Ala Ser Leu Gly Gly Lys Val Thr Ile Thr Cys Lys Ala Ser Gln Asp
          35           40           45
Ile Asn Lys Tyr Ile Ala Trp Tyr Gln His Lys Pro Gly Lys Gly Pro
          50           55           60
Arg Leu Leu Ile His Tyr Thr Ser Thr Leu Gln Pro Gly Ile Pro Ser
65           70           75           80
Arg Phe Ser Gly Ser Gly Ser Gly Arg Asp Tyr Ser Phe Ser Ile Ser
          85           90           95
Asn Leu Glu Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp
          100          105          110
Asn Leu Leu
          115

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<210> 40

<211> 12

<212> PRT

<213> mus musculus

<400> 40

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Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
1           5           10

```

<210> 41

<211> 117

<212> PRT

<213> homo sapiens

<400> 41

```

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Gln Leu Trp
1           5           10           15
Leu Ser Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
          20           25           30
Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Gln Ala Ser
          35           40           45

```

Gln Asp Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys
 50 55 60
 Ala Pro Lys Leu Leu Ile Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val
 65 70 75 80
 Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr
 85 90 95
 Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln
 100 105 110
 Tyr Asp Asn Leu Pro
 115

<210> 42
 <211> 12
 <212> PRT
 <213> homo sapiens

<400> 42

Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 1 5 10

<210> 43
 <211> 98
 <212> PRT
 <213> mus musculus

<400> 43

Glu Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Asp Tyr
 20 25 30
 Asn Met Tyr Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
 35 40 45
 Gly Tyr Ile Asp Pro Tyr Asn Gly Gly Thr Ser Tyr Asn Gln Lys Phe
 50 55 60
 Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Phe
 65 70 75 80
 Met His Leu Asn Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg

<210> 44
 <211> 2
 <212> PRT
 <213> mus musculus

<400> 44

Gln Thr
 1

<210> 45
 <211> 16
 <212> PRT
 <213> mus musculus

<400> 45

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Asp Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
1          5          10          15

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<210> 46

<211> 98

<212> PRT

<213> homo sapiens

<400> 46

```

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1          5          10          15
Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Asp Tyr
          20          25          30
Tyr Met His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
          35          40          45
Gly Leu Val Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Glu Lys Phe
          50          55          60
Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asp 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 Thr

```

<210> 47

<211> 121

<212> PRT

<213> homo sapiens

<400> 47

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Met Ser Val Ser Phe Leu Ile Phe Leu Pro Val Leu Gly Leu Pro Trp
1          5          10          15
Gly Val Leu Ser Gln Val Gln Leu Gln Ser Gly Pro Gly Leu Val
          20          25          30
Lys Pro Ser Gln Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser
          35          40          45
Val Ser Ser Asn Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser
          50          55          60
Arg Gly Leu Glu Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr
65          70          75          80
Asn Asp Tyr Ala Val Ser Val Lys Ser Arg Ile Thr Ile Asn Pro Asp
          85          90          95
Thr Ser Lys Asn Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu
          100          105          110
Asp Thr Ala Val Tyr Tyr Cys Ala Arg
          115          120

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<210> 48

<211> 15

<212> PRT

<213> homo sapiens

<400> 48

Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1 5 10 15

<210> 49
 <211> 97
 <212> PRT
 <213> homo sapiens

<400> 49

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
 35 40 45
 Gly Trp Ile Asn Ala Gly Asn Gly Asn Thr Lys Tyr Ser Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr
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 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala

<210> 50
 <211> 643
 <212> DNA
 <213> mus musculus

<400> 50

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 ctattcagtt cctggggctc ttgttgttct ggcttcattg taaggagttt aacattgaat 180
 atgctaataaa gagtatgtga tcaggaattt ctggctcctc agaaaaatct tctttgaata 240
 taattaattt catagggatt tgtgttcttt ttaattatag gtgctcagtg tgacatccag 300
 atgacacagt ctccatcctc actgtctgca tctctgggag gcaaagtcac catcacttgc 360
 aaggcaagcc aagacattaa caagtatata gcttggtacc aacacaagcc tggaaaaggt 420
 cctaggctgc tcatacatca cacatctaca ttacagccag gcatcccatc aaggttcagt 480
 ggaagtgggt ctgggagaga ttattccttc agcatcagca acctggagcc tgaagatatt 540
 gcaacttatt attgtctaca gtatgataat cttctaccca cagtgatata aatcataaca 600
 aaaaccaccc aggggaagcag aagtgaagag ctagggtgcc cac 643

<210> 51
 <211> 39
 <212> DNA
 <213> mus musculus

<400> 51
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<210> 52
 <211> 667
 <212> DNA
 <213> homo sapiens

<400> 52

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aggacacagc	atggacatga	gggtccctgc	tcagctcctg	gggctcctgc	agctctggct	180
ctcaggttaag	gaaggataac	actaggaatt	ttctcagcca	gtgtgctcag	tacagcctgg	240
ctcttgatgg	aagccttcct	ataatatgac	taatagtatg	aatatttggtg	tttatgtttc	300
taatcgcagg	tgccagatgt	gacatccaga	tgacccagtc	tccatcctcc	ctgtctgcat	360
ctgtaggaga	cagagtcacc	atcacttgcc	aggcgagtca	ggacattagc	aactatttaa	420
attggtatca	gcagaaacca	gggaaagccc	ctaagctcct	gatctacgat	gcaccaatt	480
tggaaacagg	ggteccatca	aggttcagtg	gaagtggatc	tgggacagat	tttactttca	540
ccatcagcag	cctgcagcct	gaagatattg	caacatatta	ctgtcaacag	tatgataatc	600
tcctctccac	agtgtaacaa	gtcataacat	aaatcaccca	ggggagcaga	tgcgtagaggc	660
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<210> 53

<211> 37

<212> DNA

<213> homo sapiens

<400> 53

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<210> 54

<211> 294

<212> DNA

<213> mus musculus

<400> 54

gagatccagc	tgcagcagtc	tggacctgag	ctggtgaagc	ctggggcttc	agtgaaggta	60
tcctgcaagg	cttctgggta	ctcattcact	gactacaaca	tgtactgggt	gaagcagagc	120
catggaaaga	gccttgagtg	gattggatat	attgatcctt	acaatgggtg	tactagctac	180
aaccagaagt	tcaagggcaa	ggccacattg	actgttgaca	agtcctccag	cacagccttc	240
atgcatctca	acagcctgac	atctgaggac	tctgcagctc	attactgtgc	aaga	294

<210> 55

<211> 163

<212> DNA

<213> mus musculus

<400> 55

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gcctgcccc	tactcagcag	gaaggctctg	aagctctgag	aggattttga	acaagttact	120
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<210> 56

<211> 45

<212> DNA

<213> mus musculus

<400> 56

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<210> 57
 <211> 294
 <212> DNA
 <213> homo sapiens

<400> 57

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tcctgcaagg	tttctggata	caccttcacc	gactactaca	tgcactgggt	gcaacaggcc	120
cctggaaaag	ggcttgagtg	gatgggactt	gttgatcctg	aagatgggtg	aacaatatac	180
gcagagaagt	tccagggcag	agtcaccata	accgcggaca	cgtctacaga	cacagcctac	240
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<210> 58
 <211> 17
 <212> DNA
 <213> homo sapiens

<400> 58

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<210> 59
 <211> 46
 <212> DNA
 <213> homo sapiens

<400> 59

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<210> 60
 <211> 291
 <212> DNA
 <213> homo sapiens

<400> 60

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cccggacaaa	ggcttgagtg	gatgggatgg	atcaacgctg	gcaatggtaa	cacaaaatat	180
tcacagaagt	tccagggcag	agtcaccatt	accagggaca	catccgcgag	cacagcctac	240
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<210> 61
 <211> 299
 <212> PRT
 <213> homo sapiens

<400> 61

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Leu	Ala	Ile	Leu	Leu	Cys	Ser	Leu	Ala	Leu	Gly	Ser	Val	Thr	Val	His

[illegible]

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<210> 62
<211> 897
<212> DNA
<213> homo sapiens
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<400> 62

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cctgagaata	atcctgtgaa	gttgtcctgt	gcctactcgg	gcttttcttc	tccccgtgtg	180
gagtggaagt	ttgaccaagg	agacaccacc	agactcgttt	gctataataa	caagatcaca	240
gcttcctatg	aggaccgggt	gaccttcttg	ccaactggta	tcaccttcaa	gtccgtgaca	300
cgggaagaca	ctgggacata	cacttgatatg	gtctctgagg	aaggcggcaa	cagctatggg	360
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cccattgactt	caaatgctgt	gcgcctggaa	gctgtggagc	ggaatgtggg	ggtcatcgtg	720
cgagcgtcc	tgttaacctt	gattctcctg	ggaatctctg	tttttggcatt	ctggtttgcc	780
tatagccgag	gccactttga	cagaacaaag	aaagggactt	cgagtaagaa	ggtgatttac	840
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<210> 63
 <211> 259
 <212> PRT
 <213> homo sapiens

<400> 63

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			20					25					30		
Ser	Gly	Phe	Ser	Ser	Pro	Arg	Ala	Ala	Ser	Tyr	Glu	Asp	Arg	Val	Thr
		35				40						45			
Phe	Leu	Pro	Thr	Gly	Ile	Thr	Phe	Lys	Ser	Val	Thr	Arg	Glu	Asp	Thr
	50				55						60				
Gly	Thr	Tyr	Thr	Cys	Met	Val	Ser	Glu	Glu	Gly	Gly	Asn	Ser	Tyr	Gly
65				70					75					80	
Glu	Val	Lys	Val	Lys	Leu	Ile	Val	Leu	Val	Pro	Pro	Ser	Lys	Pro	Thr
			85					90						95	
Val	Asn	Ile	Pro	Ser	Ser	Ala	Thr	Ile	Gly	Asn	Arg	Ala	Val	Leu	Thr
			100					105					110		
Cys	Ser	Glu	Gln	Asp	Gly	Ser	Pro	Pro	Ser	Glu	Tyr	Thr	Trp	Phe	Lys
		115				120						125			
Asp	Gly	Ile	Val	Met	Pro	Thr	Asn	Pro	Lys	Ser	Thr	Arg	Ala	Phe	Ser
	130					135						140			
Asn	Ser	Ser	Tyr	Val	Leu	Asn	Pro	Thr	Thr	Gly	Glu	Leu	Val	Phe	Asp
145				150						155				160	
Pro	Leu	Ser	Ala	Ser	Asp	Thr	Gly	Glu	Tyr	Ser	Cys	Glu	Ala	Arg	Asn
			165					170						175	
Gly	Tyr	Gly	Thr	Pro	Met	Thr	Ser	Asn	Ala	Val	Arg	Met	Glu	Ala	Val
			180					185					190		
Glu	Arg	Asn	Val	Gly	Val	Ile	Val	Ala	Ala	Val	Leu	Val	Thr	Leu	Ile
		195				200					205				
Leu	Leu	Gly	Ile	Leu	Val	Phe	Gly	Ile	Trp	Phe	Ala	Tyr	Ser	Arg	Gly
	210					215					220				
His	Phe	Asp	Arg	Thr	Lys	Lys	Gly	Thr	Ser	Ser	Lys	Lys	Val	Ile	Tyr
225					230					235				240	
Ser	Gln	Pro	Ser	Ala	Arg	Ser	Glu	Gly	Glu	Phe	Lys	Gln	Thr	Ser	Ser
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Phe Leu Val

<210> 64
 <211> 777
 <212> DNA
 <213> homo sapiens

<400> 64

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gcttcctatg	aggaccgggt	gaccttcttg	ccaactggta	tcaccttcaa	gtccgtgaca	180
cggaagaca	ctgggacata	cacttgatg	gtctctgagg	aaggcggcaa	cagctatggg	240
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ccttctgaat	acacctgggt	caaagatggg	atagtgatgc	ctacgaatcc	caaaagcacc	420
cgtgccttca	gcaactcttc	ctatgtcctg	aatcccacaa	caggagagct	ggtctttgat	480
cccctgtcag	cctctgatac	tggagaatac	agctgtgagg	cacggaatgg	gtatgggaca	540
cccatgactt	caaatgctgt	gcgcattggaa	gctgtggagc	ggaatgtggg	ggatcatcgtg	600
gcagccgtcc	ttgtaaccct	gattctcctg	ggaatcttgg	tttttggcat	ctggtttgcc	660

tatagccgag	gccactttga	cagaacaaag	aaagggactt	cgagtaagaa	ggtgatttac	720
agccagccta	gtgcccgaag	tgaaggagaa	ttcaaacaga	cctcgtcatt	cctggtg	777