

JPOXMLDOC01-seq1.app
SEQUENCE LISTING

<110> TagCyx Biotechnologies
<120> Aptamers binding to vWF
<130> PH-6613-PCT
<150> JP 2015-214848
<151> 2015-10-30
<160> 28
<170> PatentIn version 3.5
<210> 1
<211> 40
<212> DNA
<213> Artificial
<220>
<223> Synthetic Construct

<220>
<221> misc_feature
<222> (13)..(13)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>
<221> misc_feature
<222> (22)..(22)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>
<221> misc_feature
<222> (26)..(26)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 1
tgagactccc canctttcgc cnacanccga gggagtctca 40

<210> 2
<211> 40
<212> DNA
<213> Artificial
<220>
<223> Synthetic Construct

<220>
<221> misc_feature
<222> (13)..(13)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>
<221> misc_feature
<222> (22)..(22)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 2
tgagactccc canctttcgc cnacaaccga gggagtctca 40

<210> 3
<211> 40

<212> DNA
<213> Artificial

<220>
<223> Synthetic Construct

<220>
<221> misc_feature
<222> (13)..(13)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>
<221> misc_feature
<222> (26)..(26)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 3
tgagactccc canctttcgc caacanccga gggagtctca 40

<210> 4
<211> 40
<212> DNA
<213> Artificial

<220>
<223> Synthetic Construct

<220>
<221> misc_feature
<222> (22)..(22)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>
<221> misc_feature
<222> (26)..(26)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 4
tgagactccc caactttcgc cnacanccga gggagtctca 40

<210> 5
<211> 40
<212> DNA
<213> Artificial

<220>
<223> Synthetic Construct

<220>
<221> misc_feature
<222> (13)..(13)
<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 5
tgagactccc canctttcgc caacaaccga gggagtctca 40

<210> 6
<211> 40
<212> DNA
<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (22)..(22)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 6

tgagactccc caactttcgc cnacaaccga gggagtctca

40

<210> 7

<211> 40

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (26)..(26)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 7

tgagactccc caactttcgc caacanccga gggagtctca

40

<210> 8

<211> 40

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<400> 8

tgagactccc caactttcgc caacaaccga gggagtctca

40

<210> 9

<211> 38

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (12)..(12)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (21)..(21)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 9

gagactcccc anctttcgcc nacaaccgag ggagtctc

38

<210> 10

<211> 41

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<400> 10

ggcgtgcagt gccttcggcc gtgcggtgcc tccgtcacgc c

41

<210> 11

<211> 40

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (13)..(13)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (22)..(22)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (26)..(26)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 11

cgaggctccc canctttcgc cnacanccga gggagcctcg

40

<210> 12

<211> 49

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (13)..(13)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (22)..(22)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (26)..(26)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 12

cgaggctccc canctttcgc cnacanccga gggagcctcg cgcgtagcg

49

<210> 13

<211> 44

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (10)..(10)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (22)..(22)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (33)..(33)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 13

cgtgaccgan gagcacctaa cnggtctcaa cgntggaggt cacg

44

<210> 14

<211> 44

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (10)..(10)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (33)..(33)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 14

cgtgaccgan gagcacctaa caggtctcaa cgntggaggt cacg

44

<210> 15

<211> 44

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (10)..(10)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 15

cgtgaccgan gagcacctaa caggtctcaa cgatggaggt cacg

44

<210> 16

<211> 44

<212> DNA
 <213> Artificial

<220>
 <223> Synthetic Construct

<220>
 <221> misc_feature
 <222> (33)..(33)
 <223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 16
 cgtgaccgaa gagcacctaa caggtctcaa cgntggaggt cacg 44

<210> 17
 <211> 44
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic Construct

<400> 17
 cgtgaccgaa gagcacctaa caggtctcaa cgatggaggt cacg 44

<210> 18
 <211> 53
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic Construct

<220>
 <221> misc_feature
 <222> (10)..(10)
 <223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>
 <221> misc_feature
 <222> (22)..(22)
 <223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>
 <221> misc_feature
 <222> (33)..(33)
 <223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 18
 cgcggccgan gagcacctaa cnggtctcaa cgntggaggc cgcgcgcgta gcg 53

<210> 19
 <211> 44
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic Construct

<220>
 <221> misc_feature
 <222> (10)..(10)

JPOXMLDOC01-seq1.app

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (22)..(22)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (33)..(33)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 19

cgcggccgan gaggaccta cnggtctcaa cgntggaggc cgcg 44

<210> 20

<211> 42

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (10)..(10)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (31)..(31)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 20

cgcggccgan gaggaccgaa ggtctcaacg ntggaggccg cg 42

<210> 21

<211> 51

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (10)..(10)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<220>

<221> misc_feature

<222> (31)..(31)

<223> N=7-(2-thienyl)-3H-imidazo[4,5-b]pyridine-3-yl

<400> 21

cgcggccgan gaggaccgaa ggtctcaacg ntggaggccg cgcgcgtagc g 51

<210> 22

<211> 26

<212> DNA

<213> Artificial

<220>

<223> Synthetic Construct
 <400> 22
 actccctcgg ttgttggcga aagttg 26

 <210> 23
 <211> 25
 <212> DNA
 <213> Artificial

 <220>
 <223> Primer

 <400> 23
 acgaccgttc tctaattttg acgtt 25

 <210> 24
 <211> 25
 <212> DNA
 <213> Artificial

 <220>
 <223> Primer

 <400> 24
 accaaattat tgcgatacag accct 25

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

 <220>
 <223> Synthetic Construct

 <400> 25
 cgttgagacc tgtaggtgc tcttc 25

 <210> 26
 <211> 9
 <212> DNA
 <213> Artificial

 <220>
 <223> Synthetic Construct

 <400> 26
 cgcgtagcg 9

 <210> 27
 <211> 8442
 <212> DNA
 <213> Homo sapiens

 <400> 27
 atgattcctg ccagatttgc cggggtgctg cttgctctgg ccctcatttt gccagggacc 60
 ctttgtgcag aaggaactcg cggcaggtca tccacggccc gatgcagcct tttcggaagt 120
 gacttcgtca acacctttga tgggagcatg tacagctttg cgggatactg cagttacctc 180
 ctggcagggg gctgccagaa acgctccttc tcgattattg gggacttcca gaatggcaag 240

JPOXMLDOC01-seq1.app

agagtgagcc tctccgtgta tcttggggaa ttttttgaca tccatttggt tgtcaatggt	300
accgtgacac agggggacca aagagtctcc atgccctatg cctccaaagg gctgtatcta	360
gaaactgagg ctgggtacta caagctgtcc ggtgaggcct atggctttgt ggccaggatc	420
gatggcagcg gcaactttca agtcctgctg tcagacagat acttcaacaa gacctgcggg	480
ctgtgtggca actttaacat ctttgctgaa gatgacttta tgaccaaga agggaccttg	540
acctcgacc cttatgactt tgccaactca tgggctctga gcagtggaga acagtgggtg	600
gaacgggcat ctctcccag cagctcatgc aacatctcct ctggggaaat gcagaagggc	660
ctgtgggagc agtgccagct tctgaagagc acctcgggtg ttgcccgtg ccacctctg	720
gtggaccccg agccttttgt ggccctgtgt gagaagactt tgtgtgagtg tgctggggg	780
ctggagtgcg cctgccctgc cctcctggag tacgcccgga cctgtgcca ggagggaaatg	840
gtgctgtacg gctggaccga ccacagcgcg tgcagcccag tgtgccctgc tggatatggag	900
tataggcagt gtgtgtcccc ttgcgccagg acctgccaga gcctgcacat caatgaaatg	960
tgtcaggagc gatgcgtgga tggctgcagc tgccctgagg gacagctcct ggatgaaggc	1020
ctctgcgtgg agagcaccga gtgtccctgc gtgcattccg gaaagcgcta ccctcccggc	1080
acctccctct ctcgagactg caacacctgc atttgccgaa acagccagtg gatctgcagc	1140
aatgaagaat gtccagggga gtgccttgtc acaggtcaat cacacttcaa gagctttgac	1200
aacagatact tcaccttcag tgggatctgc cagtacctgc tggcccggga ttgccaggac	1260
cactccttct ccattgtcat tgagactgtc cagtgtgctg atgaccgca cgctgtgtgc	1320
acccgctccg tcaccgtccg gctgcctggc ctgcacaaca gccttgtaaa actgaagcat	1380
ggggcaggag ttgccatgga tggccaggac gtccagctcc ccctcctgaa aggtgacctc	1440
cgcattccagc atacagtgcg ggcctccgtg cgcctcagct acggggaggga cctgcagatg	1500
gactgggatg gccgcgggag gctgctggtg aagctgtccc ccgtctatgc cgggaagacc	1560
tgccgctgtg gtgggaatta caatggcaac cagggcgacg acttccttac cccctctggg	1620
ctggcggagc cccgggtgga ggacttcggg aacgcctgga agctgcacgg ggactgccag	1680
gacctgcaga agcagcacag cgatccctgc gccctcaacc cgcgcatgac caggttctcc	1740
gaggaggcgt gcgcggtcct gacgtcccc acattcgagg cctgccatcg tgccgtcagc	1800
ccgtgccct acctgcggaa ctgccgtac gacgtgtgct cctgctcgga cggccgcgag	1860
tgccctgtgcg gcgccctggc cagctatgcc gcggcctgcg cggggagagg cgtgcgcgtc	1920
gcgtggcgcg agccaggccg ctgtgagctg aactgcccga aaggccagggt gtacctgcag	1980
tgccgggacc cctgcaacct gacctgccgc tctctctctt acccgatga ggaatgcaat	2040
gaggcctgcc tggagggctg cttctgcccc ccagggtctt acatggatga gaggggggac	2100
tgctgcccga agggccagt cccctgttac tatgacggtg agatcttcca gccagaagac	2160
atcttctcag accatcacac catgtgctac tgtgaggatg gcttcatgca ctgtaccatg	2220
agtggagtcc ccggaagctt gctgcctgac gctgtcctca gcagtcccc gtctcatcgc	2280

JPOXMLDOC01-seq1.app

agcaaaagga	gcctatcctg	tcggcccccc	atggtcaagc	tggtgtgtcc	cgctgacaac	2340
ctgcgggctg	aagggctcga	gtgtaccaa	acgtgccaga	actatgacct	ggagtgcattg	2400
agcatgggct	gtgtctctgg	ctgcctctgc	ccccgggca	tggtccggca	tgagaacaga	2460
tgtgtggccc	tggaaagggt	tccctgcttc	catcagggca	aggagtatgc	ccctggagaa	2520
acagtgaaga	ttggctgcaa	cacttgtgtc	tgtcgggacc	ggaagtggaa	ctgcacagac	2580
catgtgtgtg	atgccacgtg	ctccacgatc	ggcatggccc	actacctcac	cttcgacggg	2640
ctcaaatacc	tgttccccgg	ggagtgccag	tacgttctgg	tgcaggatta	ctgcggcagt	2700
aaccctggga	cctttcggat	cctagtgggg	aataagggat	gcagccaccc	ctcagtgaaa	2760
tgcaagaaac	gggtcaccat	cctggtggag	ggaggagaga	ttgagctgtt	tgacggggag	2820
gtgaatgtga	agaggcccat	gaaggatgag	actcactttg	aggtggtgga	gtctggccgg	2880
tacatcattc	tgctgctggg	caaagccctc	tccgtggtct	gggaccgcca	cctgagcatc	2940
tccgtggtcc	tgaagcagac	ataccaggag	aaagtgtgtg	gcctgtgtgg	gaattttgat	3000
ggcatccaga	acaatgacct	caccagcagc	aacctccaag	tggaggaaga	ccctgtggac	3060
tttgggaact	cctggaaagt	gagctcgag	tgtgctgaca	ccagaaaagt	gcctctggac	3120
tcatccccctg	ccacctgcca	taacaacatc	atgaagcaga	cgatggtgga	ttcctcctgt	3180
agaatcctta	ccagtgcagt	cttcaggac	tgcaacaagc	tggtggaccc	cgagccatat	3240
ctggatgtct	gcattttacga	cacctgctcc	tgtgagtcca	ttggggactg	cgctctcttc	3300
tgcgacacca	ttgctgccta	tgcccacgtg	tgtgcccagc	atggcaagggt	ggtgacctgg	3360
aggacggcca	cattgtgccc	ccagagctgc	gaggagagga	atctccggga	gaacgggtat	3420
gagtgtgagt	ggcgctataa	cagctgtgca	cctgcctgtc	aagtcacgtg	tcagcacctt	3480
gagccactgg	cctgcctgtg	gcagtgtgtg	gagggctgcc	atgcccactg	ccctccaggg	3540
aaaatcctgg	atgagctttt	gcagacctgc	gttgacctg	aagactgtcc	agtgtgtgag	3600
gtggctggcc	ggcgttttgc	ctcaggaaag	aaagtcacct	tgaatcccag	tgaccttgag	3660
cactgccaga	tttgccactg	tgatgtttgc	aacctcacct	gtgaagcctg	ccaggagccg	3720
ggaggcctgg	tggtgcctcc	cacagatgcc	ccggtgagcc	ccaccactct	gtatgtggag	3780
gacatctcgg	aaccgccgtt	gcacgatttc	tactgcagca	ggctactgga	cctggtcttc	3840
ctgctggatg	gctcctccag	gctgtccgag	gctgagtttg	aagtgtgtaa	ggcctttgtg	3900
gtggacatga	tggagcggct	gcgcatctcc	cagaagtggg	tccgcgtggc	cgtggtggag	3960
taccacgacg	gctcccacgc	ctacatcggg	ctcaaggacc	ggaagcgacc	gtcagagctg	4020
cggcgcattg	ccagccaggt	gaagtatgcg	ggcagccagg	tggcctccac	cagcgaggtc	4080
ttgaaataca	cactgtttcca	aatcttcagc	aagatcgacc	gccctgaagc	ctcccccatc	4140
accctgtctc	tgatggccag	ccaggagccc	caacggatgt	cccggaaactt	tgtccgctac	4200
gtccagggcc	tgaagaagaa	gaaggtcatt	gtgatcccg	tgggcattgg	gccccatgcc	4260
aacctcaagc	agatccgcct	catcgagaag	caggccccctg	agaacaaggc	cttcgtgctg	4320

JPOXMLDOC01-seq1.app

agcagtgtgg atgagctgga gcagcaaagg gacgagatcg ttagctacct ctgtgacctt	4380
gcccctgaag cccctcctcc tactctgccc cccgacatgg cacaagtcac tgtgggccccg	4440
gggctcttgg gggtttcgac cctggggccc aagaggaact ccatggttct ggatgtggcg	4500
ttcgtcctgg aaggatcgga caaaattggt gaagccgact tcaacaggag caaggagttc	4560
atggaggagg tgattcagcg gatggatgtg ggccaggaca gcatccacgt cacggtgctg	4620
cagtactcct acatggtgac tgtggagtac cccttcagcg aggcacagtc caaaggggac	4680
atcctgcagc ggggtgcgaga gatccgctac cagggcggca acaggaccaa cactgggctg	4740
gccctgcggt acctctctga ccacagcttc ttggctagcc agggtgaccg ggagcaggcg	4800
cccaacctgg tctacatggt caccggaat cctgcctctg atgagatcaa gaggctgcct	4860
ggagacatcc aggtggtgcc cattggagtg ggccctaatt ccaacgtgca ggagctggag	4920
aggattggct ggcccaatgc ccctatctc atccaggact ttgagacgct ccccgagag	4980
gctcctgacc tgggtgctga gaggtgctgc tccggagagg ggctgcagat cccaccctc	5040
tcccctgcac ctgactgcag ccagcccctg gacgtgatcc ttctcctgga tggctcctcc	5100
agtttcccag cttcttattt tgatgaaatg aagagtttcg ccaaggcttt catttcaaaa	5160
gccaatatag ggcctcgtct cactcaggtg tcagtgtctg agtatggaag catcaccacc	5220
attgacgtgc catggaacgt ggtcccggag aaagcccatt tgctgagcct tgtggacgtc	5280
atgcagcggg agggaggccc cagccaaatc ggggatgcct tgggctttgc tgtgcgatac	5340
ttgacttcag aaatgcatgg tgccaggccg ggagcctcaa aggcggtggt catcctggtc	5400
acggacgtct ctgtggattc agtggatgca gcagctgatg ccgccaggtc caacagagtg	5460
acagtgttcc ctattggaat tggagatcgc tacgatgcag cccagctacg gatcttggca	5520
ggcccagcag gcgactccaa cgtggtgaag ctccagcgaa tcgaagacct ccctaccatg	5580
gtcaccttgg gcaattcctt cctccacaaa ctgtgctctg gatttgttag gatttgcattg	5640
gatgaggatg ggaatgagaa gagggccggg gacgtctgga ccttgccaga ccagtgccac	5700
accgtgactt gccagccaga tggccagacc ttgctgaaga gtcacgaggc caactgtgac	5760
cgggggctga ggccttcgtg ccctaacagc cagtcccctg tttaaagtga agagacctgt	5820
ggctgccgct ggacctgccc ctgctgtgtg acaggcagct ccactcggca catcgtgacc	5880
tttgatgggc agaatttcaa gctgactggc agctgttctt atgtcctatt tcaaaacaag	5940
gagcaggacc tggaggatg tctccataat ggtgcctgca gccctggagc aaggcagggc	6000
tgcatgaaat ccatcgaggt gaagcacagt gccctctccg tcgagctgca cagtgcacatg	6060
gaggtgacgg tgaatgggag actggtctct gtcccttacg tgggtgggaa catggaagtc	6120
aacgtttatg gtgccatcat gcatgaggtc agattcaatc accttgggtca catcttcaca	6180
ttcactccac aaaacaatga gttccaactg cagctcagcc ccaagacttt tgcttcaaa	6240
acgtatggtc tgtgtgggat ctgtgatgag aacggagcca atgacttcat gctgagggat	6300
ggcacagtca ccacagactg gaaaacactt gttcaggaat ggactgtgca gcggccaggg	6360

cagacgtgcc agcccatcct ggaggagcag tgtcttgtcc ccgacagctc ccactgccag	6420
gtcctcctct taccactgtt tgctgaatgc cacaagggtcc tggctccagc cacattctat	6480
gccatctgcc agcaggacag ttgccaccag gagcaagtgt gtgaggatgat cgcctcttat	6540
gccacactct gtcggaccaa cgggggtctgc gttgactgga ggacacctga tttctgtgct	6600
atgtcatgcc caccatctct ggtctacaac cactgtgagc atggctgtcc ccggcactgt	6660
gatggcaacg tgagctcctg tggggaccat cctccgaag gctgtttctg ccctccagat	6720
aaagtcatgt tggaaggcag ctgtgtccct gaagaggcct gcactcagtg cattggtgag	6780
gatggagtcc agcaccagtt cctggaagcc tgggtcccg accaccagcc ctgtcagatc	6840
tgcacatgcc tcagcgggag gaaggtaaac tgcacaacgc agccctgccc cagggccaaa	6900
gctcccacgt gtggcctgtg tgaagtagcc cgcctccgcc agaatgcaga ccagtgtctg	6960
cccagagtat agtgtgtgtg tgaccacagt agctgtgacc tgccccagc gcctcactgt	7020
gaacgtggcc tccagccac actgaccaac cctggcgagt gcagaccaa cttcacctgc	7080
gcctgcagga aggaggagt caaaagagt tccccacct cctgcccccc gcaccgtttg	7140
cccacccttc ggaagaccca gtgtgtgat gagtatgagt gtgcctgcaa ctgtgtcaac	7200
tccacagtga gctgtccct tgggtacttg gcctcaactg ccaccaatga ctgtggctgt	7260
accacaacca cctgccttcc cgacaagggt tgtgtccacc gaagcaccat ctaccctgtg	7320
ggccagttct gggaggaggg ctgcgatgtg tgcacctgca ccgacatgga ggatgccgtg	7380
atgggcctcc gcgtggccca gtgtccctag aagccctgtg aggacagctg tcggctgggc	7440
ttcacttacg ttctgcatga aggcgagtgc tgtggaaggc gcctgccatc tgcctgtgag	7500
gtggtgactg gctcaccgag gggggactcc cagtcttcct ggaagagtgt cggctcccag	7560
tgggcctccc cggagaaccc ctgcctcatc aatgagtgtg tccgagtga ggaggaggtc	7620
tttatacaac aaaggaacgt ctctgcccc cagctggagg tccctgtctg cccctcgggc	7680
tttcagctga gctgtaagac ctacgcgtgc tgcccaagct gtcgctgtga gcgcatggag	7740
gcctgcatgc tcaatggcac tgtcattggg cccgggaaga ctgtgatgat cgatgtgtgc	7800
acgacctgcc gctgcatggt gcagggtggg gtcattctct gattcaagct ggagtgcagg	7860
aagaccacct gcaacccctg cccctgggt tacaaggaag aaaataacac aggtgaatgt	7920
tgtgggagat gtttgcctac ggcttgacc attcagctaa gaggaggaca gatcatgaca	7980
ctgaagcgtg atgagacgct ccaggatggc tgtgatactc acttctgcaa ggtcaatgag	8040
agaggagagt acttctggga gaagagggtc acaggctgcc caacctttga tgaacacaag	8100
tgtctggctg agggaggtaa aattatgaaa attccaggca cctgctgtga cacatgtgag	8160
gagcctgagt gcaacgacat cactgccagg ctgcagtatg tcaagggtgg aagctgtaag	8220
tctgaagtag aggtggatat ccactactgc cagggcaaat gtgccagcaa agccatgtac	8280
tccattgaca tcaacgatgt gcaggaccag tgctcctgct gctctccgac acggacggag	8340
cccatgcagg tggccctgca ctgcaccaat ggctctgttg tgtaccatga ggttctcaat	8400

gccatggagt gcaaattgctc cccaggaag tgcagcaagt ga

8442

<210> 28
 <211> 2813
 <212> PRT
 <213> Homo sapiens

<400> 28

Met Ile Pro Ala Arg Phe Ala Gly Val Leu Leu Ala Leu Ala Leu Ile
 1 5 10 15

Leu Pro Gly Thr Leu Cys Ala Glu Gly Thr Arg Gly Arg Ser Ser Thr
 20 25 30

Ala Arg Cys Ser Leu Phe Gly Ser Asp Phe Val Asn Thr Phe Asp Gly
 35 40 45

Ser Met Tyr Ser Phe Ala Gly Tyr Cys Ser Tyr Leu Leu Ala Gly Gly
 50 55 60

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

Arg Val Ser Leu Ser Val Tyr Leu Gly Glu Phe Phe Asp Ile His Leu
 85 90 95

Phe Val Asn Gly Thr Val Thr Gln Gly Asp Gln Arg Val Ser Met Pro
 100 105 110

Tyr Ala Ser Lys Gly Leu Tyr Leu Glu Thr Glu Ala Gly Tyr Tyr Lys
 115 120 125

Leu Ser Gly Glu Ala Tyr Gly Phe Val Ala Arg Ile Asp Gly Ser Gly
 130 135 140

Asn Phe Gln Val Leu Leu Ser Asp Arg Tyr Phe Asn Lys Thr Cys Gly
 145 150 155 160

Leu Cys Gly Asn Phe Asn Ile Phe Ala Glu Asp Asp Phe Met Thr Gln
 165 170 175

Glu Gly Thr Leu Thr Ser Asp Pro Tyr Asp Phe Ala Asn Ser Trp Ala
 180 185 190

Leu Ser Ser Gly Glu Gln Trp Cys Glu Arg Ala Ser Pro Pro Ser Ser
 195 200 205

Ser Cys Asn Ile Ser Ser Gly Glu Met Gln Lys Gly Leu Trp Glu Gln
 210 215 220

Cys Gln Leu Leu Lys Ser Thr Ser Val Phe Ala Arg Cys His Pro Leu
 225 230 235 240

Val Asp Pro Glu Pro Phe Val Ala Leu Cys Glu Lys Thr Leu Cys Glu
 245 250 255
 Cys Ala Gly Gly Leu Glu Cys Ala Cys Pro Ala Leu Leu Glu Tyr Ala
 260 265 270
 Arg Thr Cys Ala Gln Glu Gly Met Val Leu Tyr Gly Trp Thr Asp His
 275 280 285
 Ser Ala Cys Ser Pro Val Cys Pro Ala Gly Met Glu Tyr Arg Gln Cys
 290 295 300
 Val Ser Pro Cys Ala Arg Thr Cys Gln Ser Leu His Ile Asn Glu Met
 305 310 315 320
 Cys Gln Glu Arg Cys Val Asp Gly Cys Ser Cys Pro Glu Gly Gln Leu
 325 330 335
 Leu Asp Glu Gly Leu Cys Val Glu Ser Thr Glu Cys Pro Cys Val His
 340 345 350
 Ser Gly Lys Arg Tyr Pro Pro Gly Thr Ser Leu Ser Arg Asp Cys Asn
 355 360 365
 Thr Cys Ile Cys Arg Asn Ser Gln Trp Ile Cys Ser Asn Glu Glu Cys
 370 375 380
 Pro Gly Glu Cys Leu Val Thr Gly Gln Ser His Phe Lys Ser Phe Asp
 385 390 395 400
 Asn Arg Tyr Phe Thr Phe Ser Gly Ile Cys Gln Tyr Leu Leu Ala Arg
 405 410 415
 Asp Cys Gln Asp His Ser Phe Ser Ile Val Ile Glu Thr Val Gln Cys
 420 425 430
 Ala Asp Asp Arg Asp Ala Val Cys Thr Arg Ser Val Thr Val Arg Leu
 435 440 445
 Pro Gly Leu His Asn Ser Leu Val Lys Leu Lys His Gly Ala Gly Val
 450 455 460
 Ala Met Asp Gly Gln Asp Val Gln Leu Pro Leu Leu Lys Gly Asp Leu
 465 470 475 480
 Arg Ile Gln His Thr Val Thr Ala Ser Val Arg Leu Ser Tyr Gly Glu
 485 490 495
 Asp Leu Gln Met Asp Trp Asp Gly Arg Gly Arg Leu Leu Val Lys Leu
 500 505 510

JPOXMLDOC01-seq1.app

Ser Pro Val Tyr Ala Gly Lys Thr Cys Gly Leu Cys Gly Asn Tyr Asn
515 520 525

Gly Asn Gln Gly Asp Asp Phe Leu Thr Pro Ser Gly Leu Ala Glu Pro
530 535 540

Arg Val Glu Asp Phe Gly Asn Ala Trp Lys Leu His Gly Asp Cys Gln
545 550 555 560

Asp Leu Gln Lys Gln His Ser Asp Pro Cys Ala Leu Asn Pro Arg Met
565 570 575

Thr Arg Phe Ser Glu Glu Ala Cys Ala Val Leu Thr Ser Pro Thr Phe
580 585 590

Glu Ala Cys His Arg Ala Val Ser Pro Leu Pro Tyr Leu Arg Asn Cys
595 600 605

Arg Tyr Asp Val Cys Ser Cys Ser Asp Gly Arg Glu Cys Leu Cys Gly
610 615 620

Ala Leu Ala Ser Tyr Ala Ala Ala Cys Ala Gly Arg Gly Val Arg Val
625 630 635 640

Ala Trp Arg Glu Pro Gly Arg Cys Glu Leu Asn Cys Pro Lys Gly Gln
645 650 655

Val Tyr Leu Gln Cys Gly Thr Pro Cys Asn Leu Thr Cys Arg Ser Leu
660 665 670

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

Cys Pro Pro Gly Leu Tyr Met Asp Glu Arg Gly Asp Cys Val Pro Lys
690 695 700

Ala Gln Cys Pro Cys Tyr Tyr Asp Gly Glu Ile Phe Gln Pro Glu Asp
705 710 715 720

Ile Phe Ser Asp His His Thr Met Cys Tyr Cys Glu Asp Gly Phe Met
725 730 735

His Cys Thr Met Ser Gly Val Pro Gly Ser Leu Leu Pro Asp Ala Val
740 745 750

Leu Ser Ser Pro Leu Ser His Arg Ser Lys Arg Ser Leu Ser Cys Arg
755 760 765

Pro Pro Met Val Lys Leu Val Cys Pro Ala Asp Asn Leu Arg Ala Glu
770 775 780

Gly Leu Glu Cys Thr Lys Thr Cys Gln Asn Tyr Asp Leu Glu Cys Met
 785 790 795 800
 Ser Met Gly Cys Val Ser Gly Cys Leu Cys Pro Pro Gly Met Val Arg
 805 810 815
 His Glu Asn Arg Cys Val Ala Leu Glu Arg Cys Pro Cys Phe His Gln
 820 825 830
 Gly Lys Glu Tyr Ala Pro Gly Glu Thr Val Lys Ile Gly Cys Asn Thr
 835 840 845
 Cys Val Cys Arg Asp Arg Lys Trp Asn Cys Thr Asp His Val Cys Asp
 850 855 860
 Ala Thr Cys Ser Thr Ile Gly Met Ala His Tyr Leu Thr Phe Asp Gly
 865 870 875 880
 Leu Lys Tyr Leu Phe Pro Gly Glu Cys Gln Tyr Val Leu Val Gln Asp
 885 890 895
 Tyr Cys Gly Ser Asn Pro Gly Thr Phe Arg Ile Leu Val Gly Asn Lys
 900 905 910
 Gly Cys Ser His Pro Ser Val Lys Cys Lys Lys Arg Val Thr Ile Leu
 915 920 925
 Val Glu Gly Gly Glu Ile Glu Leu Phe Asp Gly Glu Val Asn Val Lys
 930 935 940
 Arg Pro Met Lys Asp Glu Thr His Phe Glu Val Val Glu Ser Gly Arg
 945 950 955 960
 Tyr Ile Ile Leu Leu Leu Gly Lys Ala Leu Ser Val Val Trp Asp Arg
 965 970 975
 His Leu Ser Ile Ser Val Val Leu Lys Gln Thr Tyr Gln Glu Lys Val
 980 985 990
 Cys Gly Leu Cys Gly Asn Phe Asp Gly Ile Gln Asn Asn Asp Leu Thr
 995 1000 1005
 Ser Ser Asn Leu Gln Val Glu Glu Asp Pro Val Asp Phe Gly Asn
 1010 1015 1020
 Ser Trp Lys Val Ser Ser Gln Cys Ala Asp Thr Arg Lys Val Pro
 1025 1030 1035
 Leu Asp Ser Ser Pro Ala Thr Cys His Asn Asn Ile Met Lys Gln
 1040 1045 1050

Thr	Met	Val	Asp	Ser	Ser	Cys	Arg	Ile	Leu	Thr	Ser	Asp	Val	Phe
	1055					1060					1065			
Gln	Asp	Cys	Asn	Lys	Leu	Val	Asp	Pro	Glu	Pro	Tyr	Leu	Asp	Val
	1070					1075					1080			
Cys	Ile	Tyr	Asp	Thr	Cys	Ser	Cys	Glu	Ser	Ile	Gly	Asp	Cys	Ala
	1085					1090					1095			
Cys	Phe	Cys	Asp	Thr	Ile	Ala	Ala	Tyr	Ala	His	Val	Cys	Ala	Gln
	1100					1105					1110			
His	Gly	Lys	Val	Val	Thr	Trp	Arg	Thr	Ala	Thr	Leu	Cys	Pro	Gln
	1115					1120					1125			
Ser	Cys	Glu	Glu	Arg	Asn	Leu	Arg	Glu	Asn	Gly	Tyr	Glu	Cys	Glu
	1130					1135					1140			
Trp	Arg	Tyr	Asn	Ser	Cys	Ala	Pro	Ala	Cys	Gln	Val	Thr	Cys	Gln
	1145					1150					1155			
His	Pro	Glu	Pro	Leu	Ala	Cys	Pro	Val	Gln	Cys	Val	Glu	Gly	Cys
	1160					1165					1170			
His	Ala	His	Cys	Pro	Pro	Gly	Lys	Ile	Leu	Asp	Glu	Leu	Leu	Gln
	1175					1180					1185			
Thr	Cys	Val	Asp	Pro	Glu	Asp	Cys	Pro	Val	Cys	Glu	Val	Ala	Gly
	1190					1195					1200			
Arg	Arg	Phe	Ala	Ser	Gly	Lys	Lys	Val	Thr	Leu	Asn	Pro	Ser	Asp
	1205					1210					1215			
Pro	Glu	His	Cys	Gln	Ile	Cys	His	Cys	Asp	Val	Val	Asn	Leu	Thr
	1220					1225					1230			
Cys	Glu	Ala	Cys	Gln	Glu	Pro	Gly	Gly	Leu	Val	Val	Pro	Pro	Thr
	1235					1240					1245			
Asp	Ala	Pro	Val	Ser	Pro	Thr	Thr	Leu	Tyr	Val	Glu	Asp	Ile	Ser
	1250					1255					1260			
Glu	Pro	Pro	Leu	His	Asp	Phe	Tyr	Cys	Ser	Arg	Leu	Leu	Asp	Leu
	1265					1270					1275			
Val	Phe	Leu	Leu	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Glu	Ala	Glu	Phe
	1280					1285					1290			
Glu	Val	Leu	Lys	Ala	Phe	Val	Val	Asp	Met	Met	Glu	Arg	Leu	Arg
	1295					1300					1305			

Ile	Ser	Gln	Lys	Trp	Val	Arg	Val	Ala	Val	Val	Glu	Tyr	His	Asp
1310						1315					1320			
Gly	Ser	His	Ala	Tyr	Ile	Gly	Leu	Lys	Asp	Arg	Lys	Arg	Pro	Ser
1325						1330					1335			
Glu	Leu	Arg	Arg	Ile	Ala	Ser	Gln	Val	Lys	Tyr	Ala	Gly	Ser	Gln
1340						1345					1350			
Val	Ala	Ser	Thr	Ser	Glu	Val	Leu	Lys	Tyr	Thr	Leu	Phe	Gln	Ile
1355						1360					1365			
Phe	Ser	Lys	Ile	Asp	Arg	Pro	Glu	Ala	Ser	Arg	Ile	Thr	Leu	Leu
1370						1375					1380			
Leu	Met	Ala	Ser	Gln	Glu	Pro	Gln	Arg	Met	Ser	Arg	Asn	Phe	Val
1385						1390					1395			
Arg	Tyr	Val	Gln	Gly	Leu	Lys	Lys	Lys	Lys	Val	Ile	Val	Ile	Pro
1400						1405					1410			
Val	Gly	Ile	Gly	Pro	His	Ala	Asn	Leu	Lys	Gln	Ile	Arg	Leu	Ile
1415						1420					1425			
Glu	Lys	Gln	Ala	Pro	Glu	Asn	Lys	Ala	Phe	Val	Leu	Ser	Ser	Val
1430						1435					1440			
Asp	Glu	Leu	Glu	Gln	Gln	Arg	Asp	Glu	Ile	Val	Ser	Tyr	Leu	Cys
1445						1450					1455			
Asp	Leu	Ala	Pro	Glu	Ala	Pro	Pro	Pro	Thr	Leu	Pro	Pro	Asp	Met
1460						1465					1470			
Ala	Gln	Val	Thr	Val	Gly	Pro	Gly	Leu	Leu	Gly	Val	Ser	Thr	Leu
1475						1480					1485			
Gly	Pro	Lys	Arg	Asn	Ser	Met	Val	Leu	Asp	Val	Ala	Phe	Val	Leu
1490						1495					1500			
Glu	Gly	Ser	Asp	Lys	Ile	Gly	Glu	Ala	Asp	Phe	Asn	Arg	Ser	Lys
1505						1510					1515			
Glu	Phe	Met	Glu	Glu	Val	Ile	Gln	Arg	Met	Asp	Val	Gly	Gln	Asp
1520						1525					1530			
Ser	Ile	His	Val	Thr	Val	Leu	Gln	Tyr	Ser	Tyr	Met	Val	Thr	Val
1535						1540					1545			
Glu	Tyr	Pro	Phe	Ser	Glu	Ala	Gln	Ser	Lys	Gly	Asp	Ile	Leu	Gln
1550						1555					1560			

Arg Val 1565	Arg Glu Ile Arg Tyr 1570	Gln Gly Gly Asn Arg 1575	Thr Asn Thr
Gly Leu 1580	Ala Leu Arg Tyr Leu 1585	Ser Asp His Ser Phe 1590	Leu Val Ser
Gln Gly 1595	Asp Arg Glu Gln Ala 1600	Pro Asn Leu Val Tyr 1605	Met Val Thr
Gly Asn 1610	Pro Ala Ser Asp Glu 1615	Ile Lys Arg Leu Pro 1620	Gly Asp Ile
Gln Val 1625	Val Pro Ile Gly Val 1630	Gly Pro Asn Ala Asn 1635	Val Gln Glu
Leu Glu 1640	Arg Ile Gly Trp Pro 1645	Asn Ala Pro Ile Leu 1650	Ile Gln Asp
Phe Glu 1655	Thr Leu Pro Arg Glu 1660	Ala Pro Asp Leu Val 1665	Leu Gln Arg
Cys Cys 1670	Ser Gly Glu Gly Leu 1675	Gln Ile Pro Thr Leu 1680	Ser Pro Ala
Pro Asp 1685	Cys Ser Gln Pro Leu 1690	Asp Val Ile Leu Leu 1695	Leu Asp Gly
Ser Ser 1700	Ser Phe Pro Ala Ser 1705	Tyr Phe Asp Glu Met 1710	Lys Ser Phe
Ala Lys 1715	Ala Phe Ile Ser Lys 1720	Ala Asn Ile Gly Pro 1725	Arg Leu Thr
Gln Val 1730	Ser Val Leu Gln Tyr 1735	Gly Ser Ile Thr Thr 1740	Ile Asp Val
Pro Trp 1745	Asn Val Val Pro Glu 1750	Lys Ala His Leu Leu 1755	Ser Leu Val
Asp Val 1760	Met Gln Arg Glu Gly 1765	Gly Pro Ser Gln Ile 1770	Gly Asp Ala
Leu Gly 1775	Phe Ala Val Arg Tyr 1780	Leu Thr Ser Glu Met 1785	His Gly Ala
Arg Pro 1790	Gly Ala Ser Lys Ala 1795	Val Val Ile Leu Val 1800	Thr Asp Val
Ser Val 1805	Asp Ser Val Asp Ala 1810	Ala Ala Asp Ala Ala 1815	Arg Ser Asn

Arg Val 1820	Thr Val	Phe Pro	Ile 1825	Gly Ile	Gly Asp	Arg 1830	Tyr Asp	Ala
Ala Gln 1835	Leu Arg	Ile Leu	Ala 1840	Gly Pro	Ala Gly	Asp 1845	Ser Asn	Val
Val Lys 1850	Leu Gln	Arg Ile	Glu 1855	Asp Leu	Pro Thr	Met 1860	Val Thr	Leu
Gly Asn 1865	Ser Phe	Leu His	Lys 1870	Leu Cys	Ser Gly	Phe 1875	Val Arg	Ile
Cys Met 1880	Asp Glu	Asp Gly	Asn 1885	Glu Lys	Arg Pro	Gly 1890	Asp Val	Trp
Thr Leu 1895	Pro Asp	Gln Cys	His 1900	Thr Val	Thr Cys	Gln 1905	Pro Asp	Gly
Gln Thr 1910	Leu Leu	Lys Ser	His 1915	Arg Val	Asn Cys	Asp 1920	Arg Gly	Leu
Arg Pro 1925	Ser Cys	Pro Asn	Ser 1930	Gln Ser	Pro Val	Lys 1935	Val Glu	Glu
Thr Cys 1940	Gly Cys	Arg Trp	Thr 1945	Cys Pro	Cys Val	Cys 1950	Thr Gly	Ser
Ser Thr 1955	Arg His	Ile Val	Thr 1960	Phe Asp	Gly Gln	Asn 1965	Phe Lys	Leu
Thr Gly 1970	Ser Cys	Ser Tyr	Val 1975	Leu Phe	Gln Asn	Lys 1980	Glu Gln	Asp
Leu Glu 1985	Val Ile	Leu His	Asn 1990	Gly Ala	Cys Ser	Pro 1995	Gly Ala	Arg
Gln Gly 2000	Cys Met	Lys Ser	Ile 2005	Glu Val	Lys His	Ser 2010	Ala Leu	Ser
Val Glu 2015	Leu His	Ser Asp	Met 2020	Glu Val	Thr Val	Asn 2025	Gly Arg	Leu
Val Ser 2030	Val Pro	Tyr Val	Gly 2035	Gly Asn	Met Glu	Val 2040	Asn Val	Tyr
Gly Ala 2045	Ile Met	His Glu	Val 2050	Arg Phe	Asn His	Leu 2055	Gly His	Ile
Phe Thr 2060	Phe Thr	Pro Gln	Asn 2065	Asn Glu	Phe Gln	Leu 2070	Gln Leu	Ser

Pro	Lys	Thr	Phe	Ala	Ser	Lys	Thr	Tyr	Gly	Leu	Cys	Gly	Ile	Cys
	2075					2080					2085			
Asp	Glu	Asn	Gly	Ala	Asn	Asp	Phe	Met	Leu	Arg	Asp	Gly	Thr	Val
	2090					2095					2100			
Thr	Thr	Asp	Trp	Lys	Thr	Leu	Val	Gln	Glu	Trp	Thr	Val	Gln	Arg
	2105					2110					2115			
Pro	Gly	Gln	Thr	Cys	Gln	Pro	Ile	Leu	Glu	Glu	Gln	Cys	Leu	Val
	2120					2125					2130			
Pro	Asp	Ser	Ser	His	Cys	Gln	Val	Leu	Leu	Leu	Pro	Leu	Phe	Ala
	2135					2140					2145			
Glu	Cys	His	Lys	Val	Leu	Ala	Pro	Ala	Thr	Phe	Tyr	Ala	Ile	Cys
	2150					2155					2160			
Gln	Gln	Asp	Ser	Cys	His	Gln	Glu	Gln	Val	Cys	Glu	Val	Ile	Ala
	2165					2170					2175			
Ser	Tyr	Ala	His	Leu	Cys	Arg	Thr	Asn	Gly	Val	Cys	Val	Asp	Trp
	2180					2185					2190			
Arg	Thr	Pro	Asp	Phe	Cys	Ala	Met	Ser	Cys	Pro	Pro	Ser	Leu	Val
	2195					2200					2205			
Tyr	Asn	His	Cys	Glu	His	Gly	Cys	Pro	Arg	His	Cys	Asp	Gly	Asn
	2210					2215					2220			
Val	Ser	Ser	Cys	Gly	Asp	His	Pro	Ser	Glu	Gly	Cys	Phe	Cys	Pro
	2225					2230					2235			
Pro	Asp	Lys	Val	Met	Leu	Glu	Gly	Ser	Cys	Val	Pro	Glu	Glu	Ala
	2240					2245					2250			
Cys	Thr	Gln	Cys	Ile	Gly	Glu	Asp	Gly	Val	Gln	His	Gln	Phe	Leu
	2255					2260					2265			
Glu	Ala	Trp	Val	Pro	Asp	His	Gln	Pro	Cys	Gln	Ile	Cys	Thr	Cys
	2270					2275					2280			
Leu	Ser	Gly	Arg	Lys	Val	Asn	Cys	Thr	Thr	Gln	Pro	Cys	Pro	Thr
	2285					2290					2295			
Ala	Lys	Ala	Pro	Thr	Cys	Gly	Leu	Cys	Glu	Val	Ala	Arg	Leu	Arg
	2300					2305					2310			
Gln	Asn	Ala	Asp	Gln	Cys	Cys	Pro	Glu	Tyr	Glu	Cys	Val	Cys	Asp
	2315					2320					2325			

Pro Val 2330	Ser Cys Asp Leu	Pro 2335	Pro Val Pro His	Cys 2340	Glu Arg Gly
Leu Gln 2345	Pro Thr Leu Thr	Asn 2350	Pro Gly Glu Cys	Arg 2355	Pro Asn Phe
Thr Cys 2360	Ala Cys Arg Lys	Glu 2365	Glu Cys Lys Arg	Val 2370	Ser Pro Pro
Ser Cys 2375	Pro Pro His Arg	Leu 2380	Pro Thr Leu Arg	Lys 2385	Thr Gln Cys
Cys Asp 2390	Glu Tyr Glu Cys	Ala 2395	Cys Asn Cys Val	Asn 2400	Ser Thr Val
Ser Cys 2405	Pro Leu Gly Tyr	Leu 2410	Ala Ser Thr Ala	Thr 2415	Asn Asp Cys
Gly Cys 2420	Thr Thr Thr Thr	Cys 2425	Leu Pro Asp Lys	Val 2430	Cys Val His
Arg Ser 2435	Thr Ile Tyr Pro	Val 2440	Gly Gln Phe Trp	Glu 2445	Glu Gly Cys
Asp Val 2450	Cys Thr Cys Thr	Asp 2455	Met Glu Asp Ala	Val 2460	Met Gly Leu
Arg Val 2465	Ala Gln Cys Ser	Gln 2470	Lys Pro Cys Glu	Asp 2475	Ser Cys Arg
Ser Gly 2480	Phe Thr Tyr Val	Leu 2485	His Glu Gly Glu	Cys 2490	Cys Gly Arg
Cys Leu 2495	Pro Ser Ala Cys	Glu 2500	Val Val Thr Gly	Ser 2505	Pro Arg Gly
Asp Ser 2510	Gln Ser Ser Trp	Lys 2515	Ser Val Gly Ser	Gln 2520	Trp Ala Ser
Pro Glu 2525	Asn Pro Cys Leu	Ile 2530	Asn Glu Cys Val	Arg 2535	Val Lys Glu
Glu Val 2540	Phe Ile Gln Gln	Arg 2545	Asn Val Ser Cys	Pro 2550	Gln Leu Glu
Val Pro 2555	Val Cys Pro Ser	Gly 2560	Phe Gln Leu Ser	Cys 2565	Lys Thr Ser
Ala Cys 2570	Cys Pro Ser Cys	Arg 2575	Cys Glu Arg Met	Glu 2580	Ala Cys Met

Leu Asn Gly Thr Val Ile Gly Pro Gly Lys Thr Val Met Ile Asp
 2585 2590 2595
 Val Cys Thr Thr Cys Arg Cys Met Val Gln Val Gly Val Ile Ser
 2600 2605 2610
 Gly Phe Lys Leu Glu Cys Arg Lys Thr Thr Cys Asn Pro Cys Pro
 2615 2620 2625
 Leu Gly Tyr Lys Glu Glu Asn Asn Thr Gly Glu Cys Cys Gly Arg
 2630 2635 2640
 Cys Leu Pro Thr Ala Cys Thr Ile Gln Leu Arg Gly Gly Gln Ile
 2645 2650 2655
 Met Thr Leu Lys Arg Asp Glu Thr Leu Gln Asp Gly Cys Asp Thr
 2660 2665 2670
 His Phe Cys Lys Val Asn Glu Arg Gly Glu Tyr Phe Trp Glu Lys
 2675 2680 2685
 Arg Val Thr Gly Cys Pro Pro Phe Asp Glu His Lys Cys Leu Ala
 2690 2695 2700
 Glu Gly Gly Lys Ile Met Lys Ile Pro Gly Thr Cys Cys Asp Thr
 2705 2710 2715
 Cys Glu Glu Pro Glu Cys Asn Asp Ile Thr Ala Arg Leu Gln Tyr
 2720 2725 2730
 Val Lys Val Gly Ser Cys Lys Ser Glu Val Glu Val Asp Ile His
 2735 2740 2745
 Tyr Cys Gln Gly Lys Cys Ala Ser Lys Ala Met Tyr Ser Ile Asp
 2750 2755 2760
 Ile Asn Asp Val Gln Asp Gln Cys Ser Cys Cys Ser Pro Thr Arg
 2765 2770 2775
 Thr Glu Pro Met Gln Val Ala Leu His Cys Thr Asn Gly Ser Val
 2780 2785 2790
 Val Tyr His Glu Val Leu Asn Ala Met Glu Cys Lys Cys Ser Pro
 2795 2800 2805
 Arg Lys Cys Ser Lys
 2810