

SEQUENCE LISTING

<110> Xigen S.A.
 <120> Novel JNK inhibitor molecules
 <130> CX01P031W01
 <160> 199
 <170> PatentIn version 3.5
 <210> 1
 <211> 11
 <212> PRT
 <213> Artificial
 <220>
 <223> Consensus new JNK inhibitors
 <220>
 <221> Variant
 <222> (1)..(1)
 <223> x1 may be R, P, Q or D-enantiomeric r
 <220>
 <221> Variant
 <222> (2)..(2)
 <223> x2 may be R, P, G or D-enantiomeric r
 <220>
 <221> Variant
 <222> (3)..(3)
 <223> x3 may be K, R or D-enantionmeric k or r
 <220>
 <221> Variant
 <222> (5)..(5)
 <223> x4 may be P or K
 <220>
 <221> Variant
 <222> (6)..(6)
 <223> x5 may be T, or D-enantiomeric a, s, q, k or absent
 <220>
 <221> Variant
 <222> (7)..(7)
 <223> x6 may be T, D or A
 <220>
 <221> Variant
 <222> (9)..(9)
 <223> x7 may be N, K or D-enantiomeric n or r
 <220>
 <221> Variant
 <222> (11)..(11)
 <223> x8 may be F or D-enantiomeric f or w
 <400> 1
 Xaa Xaa Xaa Arg Xaa Xaa Xaa Leu Xaa Leu Xaa
 1 5 10

<210> 2
 <211> 11

<212> PRT
<213> Artificial

<220>
<223> rPKRPTTLNLF JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<400> 2

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 3
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTTLNLF JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Lys is D-enantiomeric Lys

<400> 3

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 4
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPaTLNLF JNK inhibitor

<220>
<221> Variant
<222> (6)..(6)
<223> Ala is D-enantiomeric Ala

<400> 4

Arg Pro Lys Arg Pro Ala Thr Leu Asn Leu Phe
1 5 10

<210> 5
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTTLnLF JNK inhibitor

<220>
<221> Variant

<222> (9)..(9)
<223> Asn is D-enantiomeric Asn

<400> 5

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 6
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTTLrLF JNK inhibitor

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 6

Arg Pro Lys Arg Pro Thr Thr Leu Arg Leu Phe
1 5 10

<210> 7
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTTLNlf JNK inhibitor

<220>
<221> Variant
<222> (11)..(11)
<223> Phe is D-enantiomeric Phe

<400> 7

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 8
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPaTLNlf JNK inhibitor

<220>
<221> variant
<222> (3)..(3)
<223> Lys is D-enantiomeric Lys

<220>
<221> variant
<222> (6)..(6)
<223> Ala is D-enantiomeric Ala

<220>

<221> Variant
<222> (11)..(11)
<223> Phe is D-enantiomeric Phe

<400> 8

Arg Pro Lys Arg Pro Ala Thr Leu Asn Leu Phe
1 5 10

<210> 9
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTTLNlf JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (11)..(11)
<223> Phe is D-enantiomeric Phe

<400> 9

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 10
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTTLrLf JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (11)..(11)
<223> Phe is D-enantiomeric Phe

<400> 10

Arg Pro Lys Arg Pro Thr Thr Leu Arg Leu Phe
1 5 10

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

<220>
<223> RRRRPTTLNLF JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (11)..(11)
<223> Phe is D-enantiomeric Phe

<400> 11

Arg Arg Arg Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 12
<211> 11
<212> PRT
<213> Artificial

<220>
<223> QRrRPTTLNLF JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (11)..(11)
<223> Phe is D-enantiomeric Phe

<400> 12

Gln Arg Arg Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 13
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTTLNLW JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (11)..(11)
<223> Trp is D-enantiomeric Trp

<400> 13

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Trp
1 5 10

<210> 14
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RPKRPTDLNLF JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (11)..(11)
<223> Phe is D-enantiomeric Phe

<400> 14

Arg Pro Lys Arg Pro Thr Asp Leu Asn Leu Phe
1 5 10

<210> 15
<211> 11
<212> PRT
<213> Artificial

<220>
<223> RRrRPTTLrLW JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (11)..(11)
<223> Trp is D-enantiomeric Trp

<400> 15

Arg Arg Arg Arg Pro Thr Thr Leu Arg Leu Trp
1 5 10

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

<220>
<223> QRrRPTTLrLW JNK inhibitor

<220>
<221> Variant
<222> (3)..(3)

<223> Arg is D-enantiomeric Arg
 <220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg
 <220>
 <221> Variant
 <222> (11)..(11)
 <223> Trp is D-enantiomeric Trp
 <400> 16
 Gln Arg Arg Arg Pro Thr Thr Leu Arg Leu Trp
 1 5 10

<210> 17
 <211> 11
 <212> PRT
 <213> Artificial
 <220>
 <223> RRrRPTDLrLw JNK inhibitor

<220>
 <221> Variant
 <222> (3)..(3)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (11)..(11)
 <223> Trp is D-enantiomeric Trp

<400> 17
 Arg Arg Arg Arg Pro Thr Asp Leu Arg Leu Trp
 1 5 10

<210> 18
 <211> 11
 <212> PRT
 <213> Artificial
 <220>
 <223> QRrRPTDLrLw JNK inhibitor

<220>
 <221> Variant
 <222> (3)..(3)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant

<222> (11)..(11)
 <223> Trp is D-enantiomeric Trp
 <400> 18
 Gln Arg Arg Arg Pro Thr Asp Leu Arg Leu Trp
 1 5 10

<210> 19
 <211> 11
 <212> PRT
 <213> Artificial
 <220>
 <223> RRrRPaTLNlf JNK inhibitor

<220>
 <221> Variant
 <222> (3)..(3)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (6)..(6)
 <223> Ala is D-enantiomeric Ala

<220>
 <221> Variant
 <222> (11)..(11)
 <223> Phe is D-enantiomeric Phe

<400> 19
 Arg Arg Arg Arg Pro Ala Thr Leu Asn Leu Phe
 1 5 10

<210> 20
 <211> 11
 <212> PRT
 <213> Artificial
 <220>
 <223> QRrRPaTLNlf JNK inhibitor

<220>
 <221> Variant
 <222> (3)..(3)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (6)..(6)
 <223> Ala is D-enantiomeric Ala

<220>
 <221> Variant
 <222> (11)..(11)
 <223> Phe is D-enantiomeric Phe

<400> 20
 Gln Arg Arg Arg Pro Ala Thr Leu Asn Leu Phe
 1 5 10

<210> 21
 <211> 11
 <212> PRT
 <213> Artificial

 <220>
 <223> RrKRPaTLNlf JNK inhibitor

 <220>
 <221> Variant
 <222> (2)..(2)
 <223> Arg is D-enantiomeric Arg

 <220>
 <221> Variant
 <222> (6)..(6)
 <223> Ala is D-enantiomeric Ala

 <220>
 <221> Variant
 <222> (11)..(11)
 <223> Phe is D-enantiomeric Phe

 <400> 21
 Arg Arg Lys Arg Pro Ala Thr Leu Asn Leu Phe
 1 5 10

<210> 22
 <211> 11
 <212> PRT
 <213> Artificial

 <220>
 <223> RPKRPSTLNlf JNK inhibitor

 <220>
 <221> Variant
 <222> (3)..(3)
 <223> Lys is D-enantiomeric Lys

 <220>
 <221> Variant
 <222> (6)..(6)
 <223> Ser is D-enantiomeric Ser

 <220>
 <221> Variant
 <222> (11)..(11)
 <223> Phe is D-enantiomeric Phe

 <400> 22
 Arg Pro Lys Arg Pro Ser Thr Leu Asn Leu Phe
 1 5 10

<210> 23
 <211> 11
 <212> PRT
 <213> Artificial

 <220>
 <223> RPKRPqTLNlf JNK inhibitor

<220>
 <221> Variant
 <222> (3)..(3)
 <223> Lys is D-enantiomeric Lys

 <220>
 <221> Variant
 <222> (6)..(6)
 <223> Gln is D-enantiomeric Gln

 <220>
 <221> Variant
 <222> (11)..(11)
 <223> Phe is D-enantiomeric Phe

 <400> 23
 Arg Pro Lys Arg Pro Gln Thr Leu Asn Leu Phe
 1 5 10

<210> 24
 <211> 11
 <212> PRT
 <213> Artificial

 <220>
 <223> RPKRPkTLNlf JNK inhibitor

<220>
 <221> Variant
 <222> (3)..(3)
 <223> Lys is D-enantiomeric Lys

 <220>
 <221> Variant
 <222> (6)..(6)
 <223> Lys is D-enantiomeric Lys

 <220>
 <221> Variant
 <222> (11)..(11)
 <223> Phe is D-enantiomeric Phe

 <400> 24

Arg Pro Lys Arg Pro Lys Thr Leu Asn Leu Phe
 1 5 10

<210> 25
 <211> 10
 <212> PRT
 <213> Artificial

 <220>
 <223> rGKRKALKLlf JNK inhibitor

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

 <220>
 <221> Variant
 <222> (10)..(10)
 <223> Phe is D-enantiomeric Phe

<400> 25

Arg Gly Lys Arg Lys Ala Leu Lys Leu Phe
1 5 10

<210> 26

<211> 10

<212> PRT

<213> Artificial

<220>

<223> rGKRKALrLf JNK inhibitor

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (8)..(8)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (10)..(10)

<223> Phe is D-enantiomeric Phe

<400> 26

Arg Gly Lys Arg Lys Ala Leu Arg Leu Phe
1 5 10

<210> 27

<211> 10

<212> PRT

<213> Artificial

<220>

<223> RRRrKALrLf JNK inhibitor

<220>

<221> Variant

<222> (3)..(3)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (8)..(8)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (10)..(10)

<223> Phe is D-enantiomeric Phe

<400> 27

Arg Arg Arg Arg Lys Ala Leu Arg Leu Phe
1 5 10

<210> 28

<211> 9

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of artificial sequence: generic subformula (Ib)
DLLLLxDmLLLLyDn

<220>
<221> VARIANT
<222> (1)..(9)
<223> /replace="any amino acid"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="D-amino acid""

<220>
<221> REPEAT
<222> (1)..(1)
<223> number of repeats is 1 or 2

<220>
<221> REPEAT
<222> (4)..(4)
<223> number of repeats is 0, 1 or 2

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="D-amino acid""

<220>
<221> REPEAT
<222> (5)..(5)
<223> number of repeats is 1 or 2

<220>
<221> REPEAT
<222> (8)..(8)
<223> number of repeats is 0, 1 or 2

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="D-amino acid""

<220>
<221> REPEAT
<222> (9)..(9)
<223> number of repeats is 1 or 2

<400> 28

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5

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

<220>
<223> Description of artificial sequence: generic subformula (Ie)
DLLLD(LLLD)a

<220>
 <221> VARIANT
 <222> (1)..(9)
 <223> /replace="any amino acid"

 <220>
 <221> VARIANT
 <222> (1)..(1)
 <223> /replace="D-amino acid"

 <220>
 <221> VARIANT
 <222> (5)..(5)
 <223> /replace="D-amino acid"

 <220>
 <221> REPEAT
 <222> (6)..(9)
 <223> number of repeats is 0, 1, 2 or 3

 <220>
 <221> VARIANT
 <222> (9)..(9)
 <223> /replace="D-amino acid"

<400> 29

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5

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

<220>
 <223> Description of artificial sequence: generic subformula (If)
 DLLLDLLLD

<220>
 <221> VARIANT
 <222> (1)..(9)
 <223> /replace="any amino acid"

<220>
 <221> VARIANT
 <222> (1)..(1)
 <223> /replace="D-amino acid"

<220>
 <221> VARIANT
 <222> (5)..(5)
 <223> /replace="D-amino acid"

<220>
 <221> VARIANT
 <222> (9)..(9)
 <223> /replace="D-amino acid"

<400> 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5

<210> 31
 <211> 9

<212> PRT
 <213> Artificial

<220>
 <223> Description of sequence: consensus sequence rXXXrXXXr

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> misc_feature
 <222> (2)..(4)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> misc_feature
 <222> (6)..(8)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<400> 31

Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg
 1 5

<210> 32
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> r3 (generic; right half)

<220>
 <221> variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> variant
 <222> (6)..(8)
 <223> Xaa can be any naturally occurring amino acid

<220>
 <221> variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<400> 32

Arg Lys Lys Arg Arg Xaa Xaa Xaa Arg
1 5

<210> 33
<211> 9
<212> PRT
<213> Artificial

<220>
<223> r3 (generic; left half)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (2)..(4)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 33

Arg Xaa Xaa Xaa Arg Gln Arg Arg Arg
1 5

<210> 34
<211> 9
<212> PRT
<213> Artificial

<220>
<223> r3 (generic; individual)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (2)..(2)
<223> Xaa is K or any other naturally occurring amino acid

<220>
<221> Variant
<222> (3)..(3)
<223> Xaa is K or any other naturally occurring amino acid

<220>
<221> Variant
<222> (4)..(4)
<223> Xaa is R or any other naturally occurring amino acid

<220>

<221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

 <220>
 <221> Variant
 <222> (6)..(6)
 <223> Xaa is Q or any other naturally occurring amino acid

 <220>
 <221> Variant
 <222> (7)..(7)
 <223> Xaa is R or any other naturally occurring amino acid

 <220>
 <221> Variant
 <222> (8)..(8)
 <223> Xaa is R or any other naturally occurring amino acid

 <220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

 <400> 34

Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg
 1 5

<210> 35
 <211> 86
 <212> PRT
 <213> Human immunodeficiency virus type 1

<220>
 <221> misc_feature
 <223> Description of sequence: HIV-1 TAT sequence (aa 1-86)

 <400> 35

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
 1 5 10 15

Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 20 25 30

His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
 35 40 45

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
 50 55 60

His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
 65 70 75 80

Pro Thr Gly Pro Lys Glu
 85

<210> 36
 <211> 36
 <212> PRT

<213> Human immunodeficiency virus type 1

<220>

<221> misc_feature

<223> Description of sequence: HIV-1 TAT sequence (aa 37-72)

<400> 36

Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys Lys Arg
1 5 10 15

Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr His Gln Val Ser
20 25 30

Leu Ser Lys Gln
35

<210> 37

<211> 22

<212> PRT

<213> Human immunodeficiency virus type 1

<220>

<221> misc_feature

<223> Description of sequence: HIV-1 TAT sequence (aa 37-58)

<400> 37

Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys Lys Arg
1 5 10 15

Arg Gln Arg Arg Arg Pro
20

<210> 38

<211> 24

<212> PRT

<213> Human immunodeficiency virus type 1

<220>

<221> misc_feature

<223> Description of sequence: HIV-1 TAT sequence (aa 38-58) including
an additional N-terminal GCC

<400> 38

Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys Lys Arg Arg
1 5 10 15

Gln Arg Arg Arg Pro Gly Gly Cys
20

<210> 39

<211> 15

<212> PRT

<213> Human immunodeficiency virus type 1

<220>

<221> misc_feature
<223> Description of sequence: HIV-1 TAT sequence (aa 47-58) including an additional C-terminal GCC

<400> 39

Cys Gly Gly Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro
1 5 10 15

<210> 40
<211> 15
<212> PRT
<213> Human immunodeficiency virus type 1

<220>
<221> misc_feature
<223> Description of sequence: HIV-1 TAT sequence (aa 47-58) including an additional N-terminal GCC

<400> 40

Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Gly Gly Cys
1 5 10 15

<210> 41
<211> 56
<212> PRT
<213> Human immunodeficiency virus type 1

<220>
<221> misc_feature
<223> Description of sequence: HIV-1 TAT sequence (aa 1-72) including a mutated Cys to Ala residue at position 37

<400> 41

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
1 5 10 15

Gln Pro Lys Thr Ala Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
20 25 30

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
35 40 45

His Gln Val Ser Leu Ser Lys Gln
50 55

<210> 42
<211> 10
<212> PRT
<213> Artificial

<220>
<223> Description of sequence: trafficking sequence L-TAT (s1a)

<400> 42

Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5 10

<210> 43
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence L-TAT (s1b)
<400> 43

Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 44
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence L-TAT (s1c)
<400> 44

Tyr Asp Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5 10

<210> 45
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of artificial sequence: D-TAT

<220>
<221> VARIANT
<222> (1)..(9)
<223> all amino acids are D-enantiomeric amino acids
<400> 45

Arg Arg Arg Gln Arg Arg Lys Lys Arg
1 5

<210> 46
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence r3-L-TAT

<220>
<221> variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>

<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 46

Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 47
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence r3-L-TATi

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 47

Arg Arg Arg Gln Arg Arg Lys Lys Arg
1 5

<210> 48
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence betaA-r3-L-TAT

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> MOD_RES
<222> (1)..(1)
<223> b-Alanine modified

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 48

Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 49

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of sequence: trafficking sequence betaA-r3-L-TAT

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> MOD_RES

<222> (1)..(1)

<223> b-Alanine modified

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 49

Arg Arg Arg Gln Arg Arg Lys Lys Arg
1 5

<210> 50

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of sequence: trafficking sequence
FITC-betaA-r3-L-TAT

<220>

<221> MOD_RES

<222> (1)..(1)

<223> FITC-b-Alanine modified

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 50

Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 51

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of sequence: trafficking sequence
FITC-betaA-r3-L-TAT

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> MOD_RES

<222> (1)..(1)

<223> FITC-b-Alanine modified

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 51

Arg Arg Arg Gln Arg Arg Lys Lys Arg
1 5

<210> 52

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of sequence: trafficking sequence TAT(s2-1)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 52

Arg Ala Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 53
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence TAT(s2-2)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 53

Arg Lys Ala Arg Arg Gln Arg Arg Arg
1 5

<210> 54
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence TAT(s2-3)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 54

Arg Lys Lys Ala Arg Gln Arg Arg Arg
1 5

<210> 55
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence TAT(s2-4)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 55

Arg Lys Lys Arg Arg Ala Arg Arg Arg
1 5

<210> 56
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence TAT(s2-5)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 56

Arg Lys Lys Arg Arg Gln Ala Arg Arg
1 5

<210> 57
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence TAT(s2-6))

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 57

Arg Lys Lys Arg Arg Gln Arg Ala Arg
1 5

<210> 58
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of sequence: trafficking sequence TAT(s2-7)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 58

Arg Asp Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 59
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-8)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 59

Arg Lys Asp Arg Arg Gln Arg Arg Arg
1 5

<210> 60

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-9)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 60

Arg Lys Lys Asp Arg Gln Arg Arg Arg
1 5

<210> 61

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-10)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 61

Arg Lys Lys Arg Arg Asp Arg Arg Arg
1 5

<210> 62

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

<220>
<223> trafficking sequence TAT(s2-11)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 62

Arg Lys Lys Arg Arg Gln Asp Arg Arg
1 5

<210> 63
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-12)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 63

Arg Lys Lys Arg Arg Gln Arg Asp Arg
1 5

<210> 64
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-13)

<220>

<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 64

Arg Glu Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 65
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-14)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 65

Arg Lys Glu Arg Arg Gln Arg Arg Arg
1 5

<210> 66
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-15)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 66

Arg Lys Lys Glu Arg Gln Arg Arg Arg
1 5

<210> 67
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-16)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 67

Arg Lys Lys Arg Arg Glu Arg Arg Arg
1 5

<210> 68
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-17)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 68

Arg Lys Lys Arg Arg Gln Glu Arg Arg
1 5

<210> 69
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-18)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 69

Arg Lys Lys Arg Arg Gln Arg Glu Arg
1 5

<210> 70
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-19)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 70

Arg Phe Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 71
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-20)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 71

Arg Lys Phe Arg Arg Gln Arg Arg Arg
1 5

<210> 72
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-21)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 72

Arg Lys Lys Phe Arg Gln Arg Arg Arg
1 5

<210> 73
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-22)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant

<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 73

Arg Lys Lys Arg Arg Phe Arg Arg Arg
1 5

<210> 74
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-23)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 74

Arg Lys Lys Arg Arg Gln Phe Arg Arg
1 5

<210> 75
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-24)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 75

Arg Lys Lys Arg Arg Gln Arg Phe Arg
1 5

<210> 76
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-25)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 76

Arg Arg Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 77
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-26)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 77

Arg Lys Arg Arg Arg Gln Arg Arg Arg
1 5

<210> 78
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-27)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 78

Arg Lys Lys Lys Arg Gln Arg Arg Arg
1 5

<210> 79
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-28)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 79

Arg Lys Lys Arg Arg Arg Arg Arg Arg
1 5

<210> 80
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-29)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 80

Arg Lys Lys Arg Arg Gln Lys Arg Arg
1 5

<210> 81
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-30)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 81

Arg Lys Lys Arg Arg Gln Arg Lys Arg
1 5

<210> 82
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-31)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 82

Arg His Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 83

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-32)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 83

Arg Lys His Arg Arg Gln Arg Arg Arg
1 5

<210> 84

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-33)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 84

Arg Lys Lys His Arg Gln Arg Arg Arg
1 5

<210> 85

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

<220>
<223> trafficking sequence TAT(s2-34)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 85

Arg Lys Lys Arg Arg His Arg Arg Arg
1 5

<210> 86
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-35)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 86

Arg Lys Lys Arg Arg Gln His Arg Arg
1 5

<210> 87
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-36)

<220>

<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 87

Arg Lys Lys Arg Arg Gln Arg His Arg
1 5

<210> 88
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-37)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 88

Arg Ile Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 89
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-38)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

 <400> 89
 Arg Lys Ile Arg Arg Gln Arg Arg Arg
 1 5

<210> 90
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> trafficking sequence TAT(s2-39)

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<400> 90
 Arg Lys Lys Ile Arg Gln Arg Arg Arg
 1 5

<210> 91
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> trafficking sequence TAT(s2-40)

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<400> 91
 Arg Lys Lys Arg Arg Ile Arg Arg Arg
 1 5

<210> 92
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-41)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 92

Arg Lys Lys Arg Arg Gln Ile Arg Arg
1 5

<210> 93
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-42)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 93

Arg Lys Lys Arg Arg Gln Arg Ile Arg
1 5

<210> 94
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-43)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 94

Arg Leu Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 95
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-44)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 95

Arg Lys Leu Arg Arg Gln Arg Arg Arg
1 5

<210> 96
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-45)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant

<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 96

Arg Lys Lys Leu Arg Gln Arg Arg Arg
1 5

<210> 97
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-46)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 97

Arg Lys Lys Arg Arg Leu Arg Arg Arg
1 5

<210> 98
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-47)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 98

Arg Lys Lys Arg Arg Gln Leu Arg Arg
1 5

<210> 99
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-48)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 99

Arg Lys Lys Arg Arg Gln Arg Leu Arg
1 5

<210> 100
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-49)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 100

Arg Met Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 101
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-50)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 101

Arg Lys Met Arg Arg Gln Arg Arg Arg
1 5

<210> 102
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-51)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 102

Arg Lys Lys Met Arg Gln Arg Arg Arg
1 5

<210> 103
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-52)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 103

Arg Lys Lys Arg Arg Met Arg Arg Arg
1 5

<210> 104
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-53)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 104

Arg Lys Lys Arg Arg Gln Met Arg Arg
1 5

<210> 105
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-54)

<220>
<221> variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 105

Arg Lys Lys Arg Arg Gln Arg Met Arg
1 5

<210> 106

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-55)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 106

Arg Asn Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 107

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-56)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 107

Arg Lys Asn Arg Arg Gln Arg Arg Arg
1 5

<210> 108

<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> trafficking sequence TAT(s2-57)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 108

Arg Lys Lys Asn Arg Gln Arg Arg Arg
1 5

<210> 109
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> trafficking sequence TAT(s2-58)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 109

Arg Lys Lys Arg Arg Asn Arg Arg Arg
1 5

<210> 110
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> trafficking sequence TAT(s2-59)

<220>

<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 110

Arg Lys Lys Arg Arg Gln Asn Arg Arg
1 5

<210> 111
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-60)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 111

Arg Lys Lys Arg Arg Gln Arg Asn Arg
1 5

<210> 112
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-61)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg
 <400> 112
 Arg Gln Lys Arg Arg Gln Arg Arg Arg
 1 5

<210> 113
 <211> 9
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> trafficking sequence TAT(s2-62)

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<400> 113
 Arg Lys Gln Arg Arg Gln Arg Arg Arg
 1 5

<210> 114
 <211> 9
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> trafficking sequence TAT(s2-63)

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<400> 114
 Arg Lys Lys Gln Arg Gln Arg Arg Arg
 1 5

<210> 115
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-64)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 115

Arg Lys Lys Arg Arg Lys Arg Arg Arg
1 5

<210> 116
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-65)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 116

Arg Lys Lys Arg Arg Gln Gln Arg Arg
1 5

<210> 117
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-66)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 117

Arg Lys Lys Arg Arg Gln Arg Gln Arg
1 5

<210> 118
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-67)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 118

Arg Ser Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 119
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-68)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant

<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 119

Arg Lys Ser Arg Arg Gln Arg Arg Arg
1 5

<210> 120
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-69)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 120

Arg Lys Lys Ser Arg Gln Arg Arg Arg
1 5

<210> 121
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-70)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 121

Arg Lys Lys Arg Arg Ser Arg Arg Arg
1 5

<210> 122
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-71)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 122

Arg Lys Lys Arg Arg Gln Ser Arg Arg
1 5

<210> 123
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-72)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 123

Arg Lys Lys Arg Arg Gln Arg Ser Arg
1 5

<210> 124
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-73)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 124

Arg Thr Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 125
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-74)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 125

Arg Lys Thr Arg Arg Gln Arg Arg Arg
1 5

<210> 126
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-75)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 126

Arg Lys Lys Thr Arg Gln Arg Arg Arg
1 5

<210> 127
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-76)

<220>
<221> variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 127

Arg Lys Lys Arg Arg Thr Arg Arg Arg
1 5

<210> 128
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-77)

<220>
<221> variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> variant
<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 128

Arg Lys Lys Arg Arg Gln Thr Arg Arg
1 5

<210> 129

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-78)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 129

Arg Lys Lys Arg Arg Gln Arg Thr Arg
1 5

<210> 130

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence TAT(s2-79)

<220>

<221> Variant

<222> (1)..(1)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (5)..(5)

<223> Arg is D-enantiomeric Arg

<220>

<221> Variant

<222> (9)..(9)

<223> Arg is D-enantiomeric Arg

<400> 130

Arg Val Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 131

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

<220>
<223> trafficking sequence TAT(s2-80)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 131

Arg Lys Val Arg Arg Gln Arg Arg Arg
1 5

<210> 132
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-81)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 132

Arg Lys Lys Val Arg Gln Arg Arg Arg
1 5

<210> 133
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-82)

<220>

<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 133

Arg Lys Lys Arg Arg Val Arg Arg Arg
1 5

<210> 134
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-83)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 134

Arg Lys Lys Arg Arg Gln Val Arg Arg
1 5

<210> 135
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-84)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 135

Arg Lys Lys Arg Arg Gln Arg Val Arg
1 5

<210> 136
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-85)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 136

Arg Trp Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 137
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-86)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 137

Arg Lys Trp Arg Arg Gln Arg Arg Arg
1 5

<210> 138
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-87)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 138

Arg Lys Lys Trp Arg Gln Arg Arg Arg
1 5

<210> 139
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-88)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 139

Arg Lys Lys Arg Arg Trp Arg Arg Arg
1 5

<210> 140
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-89)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 140

Arg Lys Lys Arg Arg Gln Trp Arg Arg
1 5

<210> 141
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-90)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 141

Arg Lys Lys Arg Arg Gln Arg Trp Arg
1 5

<210> 142
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-91)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant

<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 142

Arg Tyr Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 143
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-92)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 143

Arg Lys Tyr Arg Arg Gln Arg Arg Arg
1 5

<210> 144
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-93)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 144

Arg Lys Lys Tyr Arg Gln Arg Arg Arg
1 5

<210> 145
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-94)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 145

Arg Lys Lys Arg Arg Tyr Arg Arg Arg
1 5

<210> 146
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence TAT(s2-95)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 146

Arg Lys Lys Arg Arg Gln Tyr Arg Arg
1 5

<210> 147
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Trafficking sequence TAT(s2-96)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 147

Arg Lys Lys Arg Arg Gln Arg Tyr Arg
1 5

<210> 148
<211> 8
<212> PRT
<213> Artificial

<220>
<223> Trafficking sequence TAT(s2-97)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (8)..(8)
<223> Arg is D-enantiomeric Arg

<400> 148

Arg Lys Lys Arg Arg Gln Arg Arg
1 5

<210> 149
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Trafficking sequence TAT(s2-98)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (8)..(8)
<223> Arg is D-enantiomeric Arg

<400> 149

Arg Lys Lys Arg Arg Gln Arg Arg Lys
1 5

<210> 150
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Trafficking sequence TAT(s2-99)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (8)..(8)
<223> Arg is D-enantiomeric Arg

<400> 150

Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5

<210> 151
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence r3R6

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="D-enatiomeric amino acid arginine"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="D-enatiomeric amino acid arginine"

<220>
<221> VARIANT
<222> (9)..(9)

<223> /replace="D-enatiomeric amino acid arginine"

<400> 151

Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 152

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence L-R9

<400> 152

Arg Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 153

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence L-R8

<400> 153

Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 154

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence L-R7

<400> 154

Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 155

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> trafficking sequence L-R6

<400> 155

Arg Arg Arg Arg Arg Arg
1 5

<210> 156

<211> 5

<212> PRT

<213> Artificial Sequence

<220>
<223> trafficking sequence L-R5
<400> 156

Arg Arg Arg Arg Arg
1 5

<210> 157
<211> 9
<212> PRT
<213> Artificial

<220>
<223> all D transporter construct (all amino acid residues are D-amino acids)

<220>
<221> Variant
<222> (1)..(9)
<223> Arg is D-enantiomeric Arg

<400> 157

Arg Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 158
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Description of sequence: D/L transporter construct (D and L amino acid residues alternate, beginning wit D amino acids)

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (3)..(3)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (7)..(7)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 158

Arg Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 159
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Description of sequence: DD/LL transporter construct

<220>
<221> Variant
<222> (1)..(2)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(6)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<400> 159

Arg Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 160
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence PTD-4

<400> 160

Tyr Ala Arg Ala Ala Ala Arg Gln Ala Arg Ala
1 5 10

<210> 161
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence PTD-4

<400> 161

Trp Ala Arg Ala Ala Ala Arg Gln Ala Arg Ala
1 5 10

<210> 162
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence PTD-4

<400> 162

Trp Ala Arg Ala Gln Arg Ala Ala Ala Arg Ala
1 5 10

<210> 163
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence L-P1 (Penetratin)

<400> 163

Arg Gln Val Lys Val Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
1 5 10 15

<210> 164
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence D-P1 (Penetratin)

<400> 164

Lys Lys Trp Lys Met Arg Arg Asn Gln Phe Trp Val Lys Val Gln Arg
1 5 10 15

<210> 165
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence JNK1, bestfit

<400> 165

Trp Lys Arg Ala Ala Ala Arg Lys Ala Arg Ala Met Ser Leu Asn Leu
1 5 10 15

Phe

<210> 166
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence JNK1, bestfit (variant 1)

<400> 166

Trp Lys Arg Ala Ala Ala Arg Ala Ala Arg Ala Met Ser Leu Asn Leu
1 5 10 15

Phe

<210> 167
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence MDCK transcytose sequence

<400> 167

Arg Tyr Arg Gly Asp Leu Gly Arg Arg
1 5

<210> 168
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> trafficking sequence YKGL

<400> 168

Tyr Lys Gly Leu
1

<210> 169
<211> 4
<212> PRT
<213> Artificial

<220>
<223> trafficking sequence RRTK

<400> 169

Arg Arg Thr Lys
1

<210> 170
<211> 4
<212> PRT
<213> Artificial

<220>
<223> trafficking sequence RRPK

<400> 170

Arg Arg Pro Lys
1

<210> 171
<211> 20
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRRrRPkRPTTLNLF JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (20)..(20)
<223> Phe is D-enantiomeric Phe

<400> 171

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Thr Thr
1 5 10 15

Leu Asn Leu Phe
20

<210> 172
<211> 20
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRRrRPkRPaTLNlf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (15)..(15)
<223> Ala is D-enantiomeric Ala

<220>
<221> Variant
<222> (20)..(20)
<223> Phe is D-enantiomeric Phe

<400> 172

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Ala Thr
1 5 10 15

Leu Asn Leu Phe
20

<210> 173
<211> 20
<212> PRT
<213> Artificial

<220>
<223> rKKRRQRRrRPkRPTTLrLf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (18)..(18)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (20)..(20)
<223> Phe is D-enantiomeric Phe

<400> 173

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Thr Thr
1 5 10 15

Leu Arg Leu Phe
20

<210> 174
<211> 17
<212> PRT
<213> Artificial

<220>
<223> rKKRRQRRrRPTTLNLF JNK inhibitor

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (17)..(17)
 <223> Phe is D-enantiomeric Phe

<400> 174

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Thr Thr Leu Asn Leu
 1 5 10 15

Phe

<210> 175
 <211> 16
 <212> PRT
 <213> Artificial

<220>
 <223> rKKRRQRRPTTLNLF JNK inhibitor

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (8)..(8)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (16)..(16)
 <223> Phe is D-enantiomeric Phe

<400> 175

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Thr Thr Leu Asn Leu Phe
 1 5 10 15

<210> 176
 <211> 20
 <212> PRT
 <213> Artificial

<220>
<223> rKKRRrQRRrRPkRPTTLNLW JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (20)..(20)
<223> Trp is D-enantiomeric Trp

<400> 176

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Thr Thr
1 5 10 15

Leu Asn Leu Trp
20

<210> 177
<211> 20
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRRrRPkRPTDLNLf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (20)..(20)
<223> Phe is D-enantiomeric Phe

<400> 177

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Thr Asp
1 5 10 15

Leu Asn Leu Phe
20

<210> 178
<211> 17
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRRrRPTTLrLW JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (15)..(15)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (17)..(17)
<223> Trp is D-enantiomeric Trp

<400> 178

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Thr Thr Leu Arg Leu
1 5 10 15

Trp

<210> 179
<211> 16
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRRrRPTTLrLW JNK inhibitor

<220>

<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (8)..(8)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (14)..(14)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (16)..(16)
<223> Trp is D-enantiomeric Trp

<400> 179

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Thr Thr Leu Arg Leu Trp
1 5 10 15

<210> 180
<211> 17
<212> PRT
<213> Artificial

<220>
<223> rKKRRQRRrRPTDLrLw JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (15)..(15)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (17)..(17)
<223> Trp is D-enantiomeric Trp

<400> 180

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Thr Asp Leu Arg Leu
1 5 10 15

Trp

<210> 181
<211> 16
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRrRPTDLrLw JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (8)..(8)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (14)..(14)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (16)..(16)
<223> Trp is D-enantiomeric Trp

<400> 181

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Thr Asp Leu Arg Leu Trp
1 5 10 15

<210> 182
<211> 17
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRRrRPaTLNlf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Ala is D-enantiomeric Ala

<220>
<221> Variant
<222> (17)..(17)
<223> Phe is D-enantiomeric Phe

<400> 182

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Ala Thr Leu Asn Leu
1 5 10 15

Phe

<210> 183
<211> 16
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRrRPaTLNLF JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (8)..(8)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (11)..(11)
<223> Ala is D-enantiomeric Ala

<220>
<221> Variant
<222> (16)..(16)
<223> Phe is D-enantiomeric Phe

<400> 183

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Ala Thr Leu Asn Leu Phe
1 5 10 15

<210> 184
<211> 17
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRrKRPaTLNLF JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (8)..(8)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Ala is D-enantiomeric Ala

<220>
<221> Variant
<222> (17)..(17)
<223> Phe is D-enantiomeric Phe

<400> 184

Arg Lys Lys Arg Arg Gln Arg Arg Lys Arg Pro Ala Thr Leu Asn Leu
1 5 10 15

Phe

<210> 185
<211> 20
<212> PRT
<213> Artificial

<220>
<223> rKKRRQRRrRPkRPSTLNLf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (15)..(15)
<223> Ser is D-enantiomeric Ser

<220>
 <221> Variant
 <222> (20)..(20)
 <223> Phe is D-enantiomeric Phe

<400> 185

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Ser Thr
 1 5 10 15

Leu Asn Leu Phe
 20

<210> 186
 <211> 20
 <212> PRT
 <213> Artificial

<220>
 <223> rKKRRQRRrRPkRPqTLNlf JNK inhibitor

<220>
 <221> Variant
 <222> (1)..(1)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (5)..(5)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (9)..(9)
 <223> Arg is D-enantiomeric Arg

<220>
 <221> Variant
 <222> (12)..(12)
 <223> Lys is D-enantiomeric Lys

<220>
 <221> Variant
 <222> (15)..(15)
 <223> Gln is D-enantiomeric Gln

<220>
 <221> Variant
 <222> (20)..(20)
 <223> Phe is D-enantiomeric Phe

<400> 186

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Gln Thr
 1 5 10 15

Leu Asn Leu Phe
 20

<210> 187
 <211> 20
 <212> PRT
 <213> Artificial

<220>
<223> rKKRRrQRRrRPkRPkTLNlf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (12)..(12)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (15)..(15)
<223> Lys is D-enantiomeric Lys

<220>
<221> Variant
<222> (20)..(20)
<223> Phe is D-enantiomeric Phe

<400> 187

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Lys Thr
1 5 10 15

Leu Asn Leu Phe
20

<210> 188
<211> 18
<212> PRT
<213> Artificial

<220>
<223> rKKRRrQRRrGKRKALKLf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>

<221> Variant
<222> (18)..(18)
<223> Phe is D-enantiomeric Phe

<400> 188

Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Lys Arg Lys Ala Leu Lys
1 5 10 15

Leu Phe

<210> 189
<211> 18
<212> PRT
<213> Artificial

<220>
<223> rKKRRQRRrGKRKALrLf JNK inhibitor

<220>
<221> Variant
<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (16)..(16)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (18)..(18)
<223> Phe is D-enantiomeric Phe

<400> 189

Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Lys Arg Lys Ala Leu Arg
1 5 10 15

Leu Phe

<210> 190
<211> 16
<212> PRT
<213> Artificial

<220>
<223> rKKRRQRRrRKALrLf JNK inhibitor

<220>
<221> Variant

<222> (1)..(1)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (5)..(5)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (9)..(9)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (14)..(14)
<223> Arg is D-enantiomeric Arg

<220>
<221> Variant
<222> (16)..(16)
<223> Phe is D-enantiomeric Phe

<400> 190

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Lys Ala Leu Arg Leu Phe
1 5 10 15

<210> 191
<211> 8
<212> PRT
<213> Artificial

<220>
<223> RPTTLNLF JNK inhibitor

<400> 191

Arg Pro Thr Thr Leu Asn Leu Phe
1 5

<210> 192
<211> 9
<212> PRT
<213> Artificial

<220>
<223> KRPTTLNLF JNK inhibitor

<400> 192

Lys Arg Pro Thr Thr Leu Asn Leu Phe
1 5

<210> 193
<211> 11
<212> PRT
<213> Artificial

<220>
<223> L-IB1(s24)

<400> 193

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Phe
1 5 10

<210> 194
<211> 29
<212> PRT
<213> Artificial

<220>
<223> GRKKRRQRRRPPKRPTTLNLFQVPRSQD JNK inhibitor
<400> 194

Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Lys Arg Pro Thr
1 5 10 15

Thr Leu Asn Leu Phe Pro Gln Val Pro Arg Ser Gln Asp
20 25

<210> 195
<211> 25
<212> PRT
<213> Artificial

<220>
<223> GRKKRRQRRRPTTLNLFQVPRSQD JNK inhibitor
<400> 195

Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Thr Thr Leu Asn Leu
1 5 10 15

Phe Pro Gln Val Pro Arg Ser Gln Asp
20 25

<210> 196
<211> 31
<212> PRT
<213> Artificial

<220>
<223> L-TAT-IB1
<400> 196

Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Arg Pro Lys Arg
1 5 10 15

Pro Thr Thr Leu Asn Leu Phe Pro Gln Val Pro Arg Ser Gln Asp
20 25 30

<210> 197
<211> 31
<212> PRT
<213> Artificial

<220>
<223> D-TAT-IB1

<220>
<221> Variant
<222> (1)..(31)
<223> All amino acids are D-enantiomeric amino acids

<400> 197

Asp Gln Ser Arg Pro Val Gln Pro Phe Leu Asn Leu Thr Thr Pro Arg
1 5 10 15

Lys Pro Arg Pro Pro Arg Arg Arg Gln Arg Arg Lys Lys Arg Gly
20 25 30

<210> 198

<211> 39

<212> PRT

<213> Artificial

<220>

<223> cJun (29-67)

<400> 198

Ser Asn Pro Lys Ile Leu Lys Gln Ser Met Thr Leu Asn Leu Ala Asp
1 5 10 15

Pro Val Gly Ser Leu Lys Pro His Leu Arg Ala Lys Asn Ser Asp Leu
20 25 30

Leu Thr Ser Pro Asp Val Gly
35

<210> 199

<211> 20

<212> PRT

<213> Artificial

<220>

<223> RKKRRQRRRRPKRPATLNLF antibody negative control

<400> 199

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Ala Thr
1 5 10 15

Leu Asn Leu Phe
20