

2011014207
SEQUENCE LISTING

<110> Xigen S.A.
 <120> Novel JNK inhibitor molecules for treatment of various diseases
 <130> CX01P034WO
 <160> 199
 <170> PatentIn version 3.5
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 <223> Consensus new JNK inhibitors
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 <223> X5 may be T, or D-enantiomeric a, s, q, k or absent
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 <223> X7 may be N, K or D-enantiomeric n or r
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 <222> (11)..(11)
 <223> X8 may be F or D-enantiomeric f or w
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Arg Pro Lys Arg Pro Ala Thr Leu Asn Leu Phe
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Arg Arg Arg Arg Pro Thr Thr Leu Asn Leu Phe
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Gln Arg Arg Arg Pro Thr Thr Leu Asn Leu Phe
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Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Trp
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Arg Pro Lys Arg Pro Thr Asp Leu Asn Leu Phe
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Arg Arg Arg Arg Pro Thr Thr Leu Arg Leu Trp
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Arg Arg Arg Arg Pro Ala Thr Leu Asn Leu Phe
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Gln Arg Arg Arg Pro Ala Thr Leu Asn Leu Phe
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<220>

<221> Variant

<222> (6)..(6)

<223> Ala is D-enantiomeric Ala

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

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<220>
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Arg Pro Lys Arg Pro Lys Thr Leu Asn Leu Phe
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 <222> (10)..(10)
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 Arg Gly Lys Arg Lys Ala Leu Lys Leu Phe
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<400> 26
 Arg Gly Lys Arg Lys Ala Leu Arg Leu Phe
 1 5 10

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

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DLLLLxDmLLLyDn

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<223> /replace="any amino acid"

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

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

<220>
<221> REPEAT
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<223> number of repeats is 0, 1 or 2

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

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

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

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

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

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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5

<210> 29
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 <213> Artificial Sequence

<220>
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 DLLLD(LLLD)a

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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
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 DLLLDLLLD

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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5

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

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

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

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

<400> 31

Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg
 1 5

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 <223> r3 (generic; right half)

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<400> 32

Arg Lys Lys Arg Arg Xaa Xaa Xaa Arg
1 5

<210> 33

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<223> r3 (generic; left half)

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Arg Xaa Xaa Xaa Arg Gln Arg Arg Arg
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<220>
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<222> (7)..(7)
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<220>
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<222> (8)..(8)
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<220>
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Arg Xaa Xaa Xaa Arg Xaa Xaa Xaa Arg
1 5

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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

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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
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<213> Human immunodeficiency virus type 1

<220>
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<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
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<213> Human immunodeficiency virus type 1

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<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

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<220>
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<223> Description of sequence: HIV-1 TAT sequence (aa 38-58) including
an additional N-terminal GCC

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<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

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<211> 15

<212> PRT

<213> Human immunodeficiency virus type 1

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<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

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<213> Human immunodeficiency virus type 1

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<221> misc_feature

<223> Description of sequence: HIV-1 TAT sequence (aa 47-58) including
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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Gly Gly Cys
1 5 10 15

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

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His Gln Val Ser Leu Ser Lys Gln
50 55

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

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Arg Arg Arg Gln Arg Arg Lys Lys Arg
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<400> 46

Arg Lys Lys Arg Arg Gln Arg Arg Arg
 1 5

<210> 47
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FITC-betaA-r3-L-TAT

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<223> Arg is D-enantiomeric Arg

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<220>
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1 5

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<220>
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<400> 155

Arg Arg Arg Arg Arg Arg
1 5

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<220>
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<400> 156

Arg Arg Arg Arg Arg
1 5

<210> 157

<211> 9

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

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<400> 157

Arg Arg Arg Arg Arg Arg Arg Arg Arg
1 5

<210> 158

<211> 9

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<213> Artificial

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

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<223> Arg is D-enantiomeric Arg

<400> 158

Arg Arg Arg Arg Arg Arg Arg Arg Arg
1 5

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<210> 159
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<223> Arg is D-enantiomeric Arg

<400> 159

Arg Arg Arg Arg Arg Arg Arg Arg
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<220>
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Tyr Ala Arg Ala Ala Ala Arg Gln Ala Arg Ala
1 5 10

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<211> 11
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<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

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

<210> 163
<211> 16
<212> PRT
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<220>
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<400> 163

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

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<220>
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<400> 164

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

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<212> PRT
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<220>
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<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
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<220>
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<400> 166

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

Phe

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<400> 167

Arg Tyr Arg Gly Asp Leu Gly Arg Arg
1 5

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<220>
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<400> 168

Tyr Lys Gly Leu
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<400> 169

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

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

Leu Arg Leu Phe
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1 5 10 15

Phe

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1 5 10 15

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Leu Asn Leu Trp
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Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Thr Asp
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Leu Asn Leu Phe
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Trp

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Trp

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Phe

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Phe

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<223> Arg is D-enantiomeric Arg

2011014207

<220>
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<222> (20)..(20)
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Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Ser Thr
1 5 10 15

Leu Asn Leu Phe
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<210> 186
<211> 20
<212> PRT
<213> Artificial

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<223> Phe is D-enantiomeric Phe

<400> 186

Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Pro Lys Arg Pro Gln Thr
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Leu Asn Leu Phe
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<210> 187
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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

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Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Lys Arg Lys Ala Leu Lys
1 5 10 15

Leu Phe

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<211> 18

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<223> Arg is D-enantiomeric Arg

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<222> (16)..(16)

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<222> (18)..(18)

<223> Phe is D-enantiomeric Phe

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Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Lys Arg Lys Ala Leu Arg
1 5 10 15

Leu Phe

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Arg Lys Lys Arg Arg Gln Arg Arg Arg Arg Lys Ala Leu Arg Leu Phe
 1 5 10 15

<210> 191
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<400> 191

Arg Pro Thr Thr Leu Asn Leu Phe
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Lys Arg Pro Thr Thr Leu Asn Leu Phe

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5

<210> 193
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<400> 193

Arg Pro Lys Arg Pro Thr Thr Leu Asn Leu Phe
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<220>
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<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

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 <212> PRT
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<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
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 <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
 Seite 85

20

25

30

<210> 197
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<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

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<220>
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<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

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<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
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