

1  
SEQUENCE LISTING

<110> Protaffin Biotechnologie AG

<120> SDF-1-based glycosaminoglycan antagonists and methods of using same

<130> R 52397

<150> EP 07450189.1

<151> 2007 10 24

<160> 6

<170> PatentIn version 3.4

<210> 1

<211> 99

<212> PRT

<213> Artificial

<220>

<223> SDF-1 mutant protein

<220>

<221> M = methionine or no amino acid residue

<222> (1)..(1)

<220>

<221> X = lysine, arginine or no amino acid residue

<222> (2)..(2)

<220>

<221> X = proline, glycine or no amino acid residue

<222> (3)..(3)

<220>

<221> X = tyrosine or alanine

<222> (30)..(30)

<220>

<221> X = serine, arginine, lysine, histidine, asparagine or glutamine

<222> (40)..(40)

<220>

<221> X = GRREEKVGKKEKIGKKKRQKKRKAQKRKN or no amino acid

<222> (70)..(99)

<400> 1

Met Xaa Xaa Val Ser Leu Ser Tyr Arg Cys Pro Cys Arg Phe Phe Glu  
1 5 10 15

Ser His Val Ala Arg Ala Asn Val Lys His Leu Lys Ile Xaa Asn Thr  
20 25 30

Pro Asn Cys Ala Leu Gln Ile Xaa Ala Arg Leu Lys Asn Asn Asn Arg  
35 40 45

Gln Val Cys Ile Asp Pro Lys Leu Lys Trp Ile Gln Glu Tyr Leu Glu  
50 55 60

Lys Ala Leu Asn Lys Gly Arg Arg Glu Glu Lys Val Gly Lys Lys Glu  
65 70 75 80

2

Lys Ile Gly Lys Lys Lys Arg Gln Lys Lys Arg Lys Ala Ala Gln Lys  
85 90 95

Arg Lys Asn

<210> 2  
<211> 68  
<212> PRT  
<213> Homo Sapiens

<400> 2

Lys Pro Val Ser Leu Ser Tyr Arg Cys Pro Cys Arg Phe Phe Glu Ser  
1 5 10 15

His Val Ala Arg Ala Asn Val Lys His Leu Lys Ile Leu Asn Thr Pro  
20 25 30

Asn Cys Ala Leu Gln Ile Val Ala Arg Leu Lys Asn Asn Asn Arg Gln  
35 40 45

Val Cys Ile Asp Pro Lys Leu Lys Trp Ile Gln Glu Tyr Leu Glu Lys  
50 55 60

Ala Leu Asn Lys  
65

<210> 3  
<211> 69  
<212> PRT  
<213> Artificial

<220>  
<223> SDF-1 mutant

<400> 3

Met Arg Gly Val Ser Leu Ser Tyr Arg Cys Pro Cys Arg Phe Phe Glu  
1 5 10 15

Ser His Val Ala Arg Ala Asn Val Lys His Leu Lys Ile Lys Asn Thr  
20 25 30

Pro Asn Cys Ala Leu Gln Ile Val Ala Arg Leu Lys Asn Asn Asn Arg  
35 40 45

Gln Val Cys Ile Asp Pro Lys Leu Lys Trp Ile Gln Glu Tyr Leu Glu  
50 55 60

Lys Ala Leu Asn Lys  
65

<210> 4  
<211> 69  
<212> PRT  
<213> Artificial

&lt;220&gt;

&lt;223&gt; SDF-1 mutant

&lt;400&gt; 4

Met Arg Gly Val Ser Leu Ser Tyr Arg Cys Pro Cys Arg Phe Phe Glu  
 1 5 10 15

Ser His Val Ala Arg Ala Asn Val Lys His Leu Lys Ile Lys Asn Thr  
 20 25 30

Pro Asn Cys Ala Leu Gln Ile Lys Ala Arg Leu Lys Asn Asn Asn Arg  
 35 40 45

Gln Val Cys Ile Asp Pro Lys Leu Lys Trp Ile Gln Glu Tyr Leu Glu  
 50 55 60

Lys Ala Leu Asn Lys  
 65

&lt;210&gt; 5

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; SDF-1 mutant

&lt;400&gt; 5

Met Cys Pro Cys Arg Phe Phe Glu Ser His Val Ala Arg Ala Asn Val  
 1 5 10 15

Lys His Leu Lys Ile Lys Asn Thr Pro Asn Cys Ala Leu Gln Ile Val  
 20 25 30

Ala Arg Leu Lys Asn Asn Asn Arg Gln Val Cys Ile Asp Pro Lys Leu  
 35 40 45

Lys Trp Ile Gln Glu Tyr Leu Glu Lys Ala Leu Asn Lys  
 50 55 60

&lt;210&gt; 6

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; SDF-1 mutant

&lt;400&gt; 6

Met Cys Pro Cys Arg Phe Phe Glu Ser His Val Ala Arg Ala Asn Val  
 1 5 10 15

Lys His Leu Lys Ile Lys Asn Thr Pro Asn Cys Ala Leu Gln Ile Lys  
 20 25 30

Ala Arg Leu Lys Asn Asn Asn Arg Gln Val<sup>4</sup> Cys Ile Asp Pro Lys Leu  
35 40 45

Lys Trp Ile Gln Glu Tyr Leu Glu Lys Ala Leu Asn Lys  
50 55 60