

00746\_33\_0003\_Sequence\_Listing  
SEQUENCE LISTING

<110> Florida State University Research Foundation

<120> RECOMBINANT HUMAN FIBROBLAST GROWTH FACTOR-1 AS A NOVEL  
THERAPEUTIC FOR ISCHEMIC DISEASES AND METHODS THEREOF

<130> 00746.33.0002

<140> 13/469483

<141> 2013-08-19

<150> 61/681,819

<151> 2012-08-10

<160> 4

<170> PatentIn version 3.5.1

<210> 1

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1 wild-type FGF-1

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys  
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp  
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala  
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr  
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn  
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr  
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys  
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys  
115 120 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp  
130 135 140

<210> 2

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<211> 140  
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<400> 2: Mutant M1

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Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp  
 20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala  
 35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr  
 50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn  
 65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr  
 85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys  
 100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys  
 115 120 125

Ala Ile Leu Phe Leu Val Leu Pro Val Ser Ser Asp  
 130 135 140

<210> 3  
 <211> 140  
 <212> PRT  
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 <223> Mutant human FGF-1 protein

<400> 3: Mutant M2

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys  
 1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp  
 20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala  
 35 40 45

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Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr  
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn  
65 70 75 80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr  
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys  
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys  
115 120 125

Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser Asp  
130 135 140

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<211> 134  
<212> PRT  
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<400> 4: MUTANT M3

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys  
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp  
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala  
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr  
50 55 60

Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly Ser Gln Thr Pro Asn  
65 70 75 80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr  
85 90 95

Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly Ile Lys Lys Asn Gly  
100 110 115

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Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro  
125 130

Leu Pro Val Ser Ser Asp  
135 140