

SEQUENCE LISTING

<110> CHONDRIAL THERAPEUTICS, INC.
 THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE
 SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES

<120> METHODS OF QUANTIFYING FRATAXIN AND FRATAXIN FUSION PROTEINS

<130> 130197-00920

<140>
 <141>

<150> 62/936,293
 <151> 2019-11-15

<150> 62/880,068
 <151> 2019-07-29

<160> 15

<170> PatentIn version 3.5

<210> 1
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1
 Met Trp Thr Leu Gly Arg Arg Ala Val Ala Gly Leu Leu Ala Ser Pro
 1 5 10 15

Ser Pro Ala Gln Ala Gln Thr Leu Thr Arg Val Pro Arg Pro Ala Glu
 20 25 30

Leu Ala Pro Leu Cys Gly Arg Arg Gly Leu Arg Thr Asp Ile Asp Ala
 35 40 45

Thr Cys Thr Pro Arg Arg Ala Ser Ser Asn Gln Arg Gly Leu Asn Gln
 50 55 60

Ile Trp Asn Val Lys Lys Gln Ser Val Tyr Leu Met Asn Leu Arg Lys
 65 70 75 80

Ser Gly Thr Leu Gly His Pro Gly Ser Leu Asp Glu Thr Thr Tyr Glu
 85 90 95

Arg Leu Ala Glu Glu Thr Leu Asp Ser Leu Ala Glu Phe Phe Glu Asp

100

105

110

Leu Ala Asp Lys Pro Tyr Thr Phe Glu Asp Tyr Asp Val Ser Phe Gly
 115 120 125

Ser Gly Val Leu Thr Val Lys Leu Gly Gly Asp Leu Gly Thr Tyr Val
 130 135 140

Ile Asn Lys Gln Thr Pro Asn Lys Gln Ile Trp Leu Ser Ser Pro Ser
 145 150 155 160

Ser Gly Pro Lys Arg Tyr Asp Trp Thr Gly Lys Asn Trp Val Tyr Ser
 165 170 175

His Asp Gly Val Ser Leu His Glu Leu Leu Ala Ala Glu Leu Thr Lys
 180 185 190

Ala Leu Lys Thr Lys Leu Asp Leu Ser Ser Leu Ala Tyr Ser Gly Lys
 195 200 205

Asp Ala
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<210> 2
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 <212> PRT
 <213> Homo sapiens

<400> 2
 Ser Gly Thr Leu Gly His Pro Gly Ser Leu Asp Glu Thr Thr Tyr Glu
 1 5 10 15

Arg Leu Ala Glu Glu Thr Leu Asp Ser Leu Ala Glu Phe Phe Glu Asp
 20 25 30

Leu Ala Asp Lys Pro Tyr Thr Phe Glu Asp Tyr Asp Val Ser Phe Gly
 35 40 45

Ser Gly Val Leu Thr Val Lys Leu Gly Gly Asp Leu Gly Thr Tyr Val
 50 55 60

Ile Asn Lys Gln Thr Pro Asn Lys Gln Ile Trp Leu Ser Ser Pro Ser

65		70		75		80									
Ser	Gly	Pro	Lys	Arg	Tyr	Asp	Trp	Thr	Gly	Lys	Asn	Trp	Val	Tyr	Ser
			85						90					95	

His	Asp	Gly	Val	Ser	Leu	His	Glu	Leu	Leu	Ala	Ala	Glu	Leu	Thr	Lys
			100					105					110		

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

Asp	Ala
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<210> 3
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 <212> PRT
 <213> Homo sapiens

<400> 3															
Met	Trp	Thr	Leu	Gly	Arg	Arg	Ala	Val	Ala	Gly	Leu	Leu	Ala	Ser	Pro
1			5						10					15	

Ser	Pro	Ala	Gln	Ala	Gln	Thr	Leu	Thr	Arg	Val	Pro	Arg	Pro	Ala	Glu
			20					25					30		

Leu	Ala	Pro	Leu	Cys	Gly	Arg	Arg	Gly	Leu	Arg	Thr	Asp	Ile	Asp	Ala
		35					40					45			

Thr	Cys	Thr	Pro	Arg	Arg	Ala	Ser	Ser	Asn	Gln	Arg	Gly	Leu	Asn	Gln
	50					55					60				

Ile	Trp	Asn	Val	Lys	Lys	Gln	Ser	Val	Tyr	Leu	Met	Asn	Leu	Arg	Lys
65					70					75					80

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

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 4

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

<210> 5

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 5

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Pro His Ala Val
1 5 10 15

Gly Asn His Arg Ser Phe Ser Asp Lys Asn Gly Leu Thr Ser
20 25 30

<210> 6

<211> 14

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<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 6

Ile Asn Leu Lys Ala Leu Ala Ala Leu Ala Lys Lys Ile Leu
1 5 10

<210> 7

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 7

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Lys Ile Asn Leu
1 5 10 15

Lys Ala Leu Ala Ala Leu Ala Lys Lys Ile Leu
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<210> 8
<211> 16
<212> PRT
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 8
Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
1 5 10 15

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

<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 9
Arg Arg Arg Arg Arg Arg Arg Arg Arg
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<210> 10
<211> 34
<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 10
Asp Ala Ala Thr Ala Thr Arg Gly Arg Ser Ala Ala Ser Arg Pro Thr
1 5 10 15

Glu Arg Pro Arg Ala Pro Ala Arg Ser Ala Ser Arg Pro Arg Arg Pro
20 25 30

Val Glu

<210> 11

<211> 224

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 11

Met Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Gly Gly Met Trp
1 5 10 15

Thr Leu Gly Arg Arg Ala Val Ala Gly Leu Leu Ala Ser Pro Ser Pro
20 25 30

Ala Gln Ala Gln Thr Leu Thr Arg Val Pro Arg Pro Ala Glu Leu Ala
35 40 45

Pro Leu Cys Gly Arg Arg Gly Leu Arg Thr Asp Ile Asp Ala Thr Cys
50 55 60

Thr Pro Arg Arg Ala Ser Ser Asn Gln Arg Gly Leu Asn Gln Ile Trp
65 70 75 80

Asn Val Lys Lys Gln Ser Val Tyr Leu Met Asn Leu Arg Lys Ser Gly
85 90 95

Thr Leu Gly His Pro Gly Ser Leu Asp Glu Thr Thr Tyr Glu Arg Leu
100 105 110

Ala Glu Glu Thr Leu Asp Ser Leu Ala Glu Phe Phe Glu Asp Leu Ala
115 120 125

Asp Lys Pro Tyr Thr Phe Glu Asp Tyr Asp Val Ser Phe Gly Ser Gly
130 135 140

Val Leu Thr Val Lys Leu Gly Gly Asp Leu Gly Thr Tyr Val Ile Asn
145 150 155 160

Lys Gln Thr Pro Asn Lys Gln Ile Trp Leu Ser Ser Pro Ser Ser Gly
165 170 175

Pro Lys Arg Tyr Asp Trp Thr Gly Lys Asn Trp Val Tyr Ser His Asp
180 185 190

Gly Val Ser Leu His Glu Leu Leu Ala Ala Glu Leu Thr Lys Ala Leu
195 200 205

Lys Thr Lys Leu Asp Leu Ser Ser Leu Ala Tyr Ser Gly Lys Asp Ala
210 215 220

<210> 12

<211> 8

<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 12

Gly Gly Met Trp Thr Leu Gly Arg

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<210> 13

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<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 13

Ser Gly Thr Leu Gly His Pro Gly Ser Leu Asp Glu Thr Thr Tyr Glu

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10

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Arg

<210> 14

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 14

Leu Gly Gly Asp Leu Gly Thr Tyr Val Ile Asn Lys
1 5 10

<210> 15

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 15

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