

# SEQUENCE LISTING

<110> Helsingin yliopisto

<120> C-terminal CDNF and MANF fragments, pharmaceutical compositions comprising same and uses thereof

<130> HY18PCT

<150> FI20175392

<151> 2017-05-04

<160> 10

<170> BiSSAP 1.3

<210> 1

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Met | Pro | Ala | Met | Lys | Ile | Cys | Glu | Lys | Leu | Lys | Lys | Leu | Asp | Ser | Gln |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Ile | Cys | Glu | Leu | Lys | Tyr | Glu | Lys | Thr | Leu | Asp | Leu | Ala | Ser | Val | Asp |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Leu | Arg | Lys | Met | Arg | Val | Ala | Glu | Leu | Lys | Gln | Ile | Leu | His | Ser | Trp |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Gly | Glu | Glu | Cys | Arg | Ala | Cys | Ala | Glu | Lys | Thr | Asp | Tyr | Val | Asn | Leu |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Ile | Gln | Glu | Leu | Ala | Pro | Lys | Tyr | Ala | Ala | Thr | His | Pro | Lys | Thr | Glu |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Leu |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |

<210> 2

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Ile | Cys | Glu | Lys | Leu | Lys | Lys | Lys | Asp | Ser | Gln | Ile | Cys | Glu | Leu | Lys |  |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |  |
| Tyr | Asp | Lys | Gln | Ile | Asp | Leu | Ser | Thr | Val | Asp | Leu | Lys | Lys | Leu | Arg |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Val | Lys | Glu | Leu | Lys | Lys | Ile | Leu | Asp | Asp | Trp | Gly | Glu | Thr | Cys | Lys |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Gly | Cys | Ala | Glu | Lys | Ser | Asp | Tyr | Ile | Arg | Lys | Ile | Asn | Glu | Leu | Met |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Pro | Lys | Tyr | Ala | Pro | Lys | Ala | Ala | Ser | Ala | Arg | Thr | Asp | Leu |     |     |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     |  |

<210> 3

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 53..54

<223> Xaa is any amino acid

<400> 3



<210> 7  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 7  
 Gln Glu Ala Gly Gly Arg Pro Gly Ala Asp Cys Glu Val Cys Lys Glu  
 1 5 10 15  
 Phe Leu Asn Arg Phe Tyr Lys Ser Leu Ile Asp Arg Gly Val Asn Phe  
 20 25 30  
 Ser Leu Asp Thr Ile Glu Lys Glu Leu Ile Ser Phe Cys Leu Asp Thr  
 35 40 45  
 Lys Gly Lys Glu Asn Arg Leu Cys Tyr Tyr Leu Gly Ala Thr Lys Asp  
 50 55 60  
 Ala Ala Thr Lys Ile Leu Ser Glu Val Thr Arg Pro Met Ser Val His  
 65 70 75 80  
 Met Pro Ala Met Lys Ile Cys Glu Lys Leu Lys Lys Leu Asp Ser Gln  
 85 90 95  
 Ile Cys Glu Leu Lys Tyr Glu Lys Thr Leu Asp Leu Ala Ser Val Asp  
 100 105 110  
 Leu Arg Lys Met Arg Val Ala Glu Leu Lys Gln Ile Leu His Ser Trp  
 115 120 125  
 Gly Glu Glu Cys Arg Ala Cys Ala Glu Lys Thr Asp Tyr Val Asn Leu  
 130 135 140  
 Ile Gln Glu Leu Ala Pro Lys Tyr Ala Ala Thr His Pro Lys Thr Glu  
 145 150 155 160  
 Leu

<210> 8  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 8  
 Gln Glu Ala Gly Gly Arg Pro Gly Ala Asp Cys Glu Val Cys Lys Glu  
 1 5 10 15  
 Phe Leu Asn Arg Phe Tyr Lys Ser Leu Ile Asp Arg Gly Val Asn Phe  
 20 25 30  
 Ser Leu Asp Thr Ile Glu Lys Glu Leu Ile Ser Phe Cys Leu Asp Thr  
 35 40 45  
 Lys Gly Lys Glu Asn Arg Leu Cys Tyr Tyr Leu Gly Ala Thr Lys Asp  
 50 55 60  
 Ala Ala Thr Lys Ile Leu Ser Glu Val Thr Arg Pro Met Ser Val His  
 65 70 75 80  
 Met Pro Ala Met Lys Ile Cys Glu Lys Leu Lys Lys Leu Asp Ser Gln  
 85 90 95  
 Ile Cys Glu Leu  
 100

<210> 9  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 9  
 Leu Arg Pro Gly Asp Cys Glu Val Cys Ile Ser Tyr Leu Gly Arg Phe  
 1 5 10 15  
 Tyr Gln Asp Leu Lys Asp Arg Asp Val Thr Phe Ser Pro Ala Thr Ile  
 20 25 30  
 Glu Asn Glu Leu Ile Lys Phe Cys Arg Glu Ala Arg Gly Lys Glu Asn  
 35 40 45  
 Arg Leu Cys Tyr Tyr Ile Gly Ala Thr Asp Asp Ala Ala Thr Lys Ile

|                                                                 |     |     |     |     |
|-----------------------------------------------------------------|-----|-----|-----|-----|
| 50                                                              |     | 55  |     | 60  |
| Ile Asn Glu Val Ser Lys Pro Leu Ala His His Ile Pro Val Glu Lys |     |     |     |     |
| 65                                                              |     | 70  |     | 80  |
| Ile Cys Glu Lys Leu Lys Lys Lys Asp Ser Gln Ile Cys Glu Leu Lys |     |     |     |     |
|                                                                 | 85  |     | 90  | 95  |
| Tyr Asp Lys Gln Ile Asp Leu Ser Thr Val Asp Leu Lys Lys Leu Arg |     |     |     |     |
|                                                                 | 100 |     | 105 | 110 |
| Val Lys Glu Leu Lys Lys Ile Leu Asp Asp Trp Gly Glu Thr Cys Lys |     |     |     |     |
|                                                                 | 115 |     | 120 | 125 |
| Gly Cys Ala Glu Lys Ser Asp Tyr Ile Arg Lys Ile Asn Glu Leu Met |     |     |     |     |
|                                                                 | 130 |     | 135 | 140 |
| Pro Lys Tyr Ala Pro Lys Ala Ala Ser Ala Arg Thr Asp Leu         |     |     |     |     |
| 145                                                             |     | 150 |     | 155 |

<210> 10  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

|                                                                 |
|-----------------------------------------------------------------|
| <400> 10                                                        |
| Leu Arg Pro Gly Asp Cys Glu Val Cys Ile Ser Tyr Leu Gly Arg Phe |
| 1 5 10 15                                                       |
| Tyr Gln Asp Leu Lys Asp Arg Asp Val Thr Phe Ser Pro Ala Thr Ile |
| 20 25 30                                                        |
| Glu Asn Glu Leu Ile Lys Phe Cys Arg Glu Ala Arg Gly Lys Glu Asn |
| 35 40 45                                                        |
| Arg Leu Cys Tyr Tyr Ile Gly Ala Thr Asp Asp Ala Ala Thr Lys Ile |
| 50 55 60                                                        |
| Ile Asn Glu Val Ser Lys Pro Leu Ala His His Ile Pro Val Glu Lys |
| 65 70 75 80                                                     |
| Ile Cys Glu Lys Leu Lys Lys Lys Asp Ser Gln Ile Cys Glu Leu     |
| 85 90 95                                                        |