

B0498PC-Sequence list_ST25-TO BE FILED (ID 248049) (2).txt
SEQUENCE LISTING

<110> University of Helsinki

<120> A method for enhanced protein synthesis

<130> B0498PC

<150> FI 20100248

<151> 2010-06-11

<150> FI20106367

<151> 2010-12-22

<160> 28

<170> PatentIn version 3.5

<210> 1

<211> 161

<212> DNA

<213> Potato virus A

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aacacccaaa ttcagttaa atactcaaaa cgcaagcatc a 161

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<211> 189

<212> PRT

<213> Potato virus A

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Gly Tyr Asn Lys Arg Gln Arg Gln Lys Leu Lys Phe Ala Arg Ala Arg
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20 25 30

His Tyr Phe Gly Ser Ala Tyr Thr Lys Lys Gly Lys Thr Lys Gly Lys
35 40 45

Thr His Gly Met Gly Lys Lys Asn His Arg Phe Val Asn Met Tyr Gly
50 55 60

Phe Asp Pro Ser Asp Tyr Thr Phe Ile Arg Tyr Val Asp Pro Leu Thr
65 70 75 80

Gly Tyr Thr Leu Asp Glu Ser Pro Tyr Thr Asp Ile Arg Leu Ile Gln
85 90 95

Ser Gln Phe Ser Asp Ile Arg Glu Gln Gln Leu Leu Asn Asp Glu Leu
100 105 110

Glu Arg Asn Met Val His Tyr Lys Pro Gly Val Gln Gly Tyr Leu Val
115 120 125

Lys Asp Lys Thr Ser Gln Ile Leu Lys Ile Asp Leu Thr Pro His Ile
130 135 140

Pro Leu Lys Val Cys Asp Ala Thr Asn Asn Ile Ala Gly His Pro Asp
145 150 155 160

Arg Glu Gly Glu Leu Arg Gln Thr Gly Lys Gly Gln Leu Leu Asp Tyr
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Ala Glu Leu Pro Gln Lys Lys Glu Ser Val Glu Phe Glu
180 185

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aagaaaggaa aaacaaaggg caaaacccat ggaatgggga aaaagaacca caggttcgtg 180
aatatgtatg gttttgatcc aagtgactat acattcattc gctatgttga tcctttaact 240
ggctacacac tagatgagag tccctatact gatatcaggc taattcagag tcaatttagt 300
gatattcgtg aacagcagtt actaaatgat gagctggaaa ggaatatggt gcactacaag 360
ccagggtgtcc aagggtatgt agtgaaggat aaaacctcac aaatactcaa aatagattta 420
actccacaca taccattgaa ggtctgagac gccacaaata acatagctgg ccatccagat 480
agagaagggg aattgaggca aactggtaag gggcagctac ttgactatgc tgaactacca 540
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<213> Arabidopsis thaliana

<400> 4

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20 25 30

Asp Asn Val Gly Ser Thr Gln Leu Gln Asn Ile Arg Lys Gly Leu Arg
35 40 45

Gly Asp Ser Val Val Leu Met Gly Lys Asn Thr Met Met Lys Arg Ser
50 55 60

Val Arg Ile His Ser Glu Asn Ser Gly Asn Thr Ala Ile Leu Asn Leu
 65 70 75 80
 Leu Pro Leu Leu Gln Gly Asn Val Gly Leu Ile Phe Thr Lys Gly Asp
 85 90 95
 Leu Lys Glu Val Ser Glu Glu Val Ala Lys Tyr Lys Val Gly Ala Pro
 100 105 110
 Ala Arg Val Gly Leu Val Ala Pro Ile Asp Val Val Val Gln Pro Gly
 115 120 125
 Asn Thr Gly Leu Asp Pro Ser Gln Thr Ser Phe Phe Gln Val Leu Asn
 130 135 140
 Ile Pro Thr Lys Ile Asn Lys Gly Thr Val Glu Ile Ile Thr Pro Val
 145 150 155 160
 Glu Leu Ile Lys Gln Gly Asp Lys Val Gly Ser Ser Glu Ala Ala Leu
 165 170 175
 Leu Ala Lys Leu Gly Ile Arg Pro Phe Ser Tyr Gly Leu Val Val Gln
 180 185 190
 Ser Val Tyr Asp Asn Gly Ser Val Phe Ser Pro Glu Val Leu Asp Leu
 195 200 205
 Thr Glu Asp Gln Leu Val Glu Lys Phe Ala Ser Gly Ile Ser Met Val
 210 215 220
 Thr Ser Leu Ala Leu Ala Val Ser Tyr Pro Thr Leu Ala Ala Ala Pro
 225 230 235 240
 His Met Phe Ile Asn Ala Tyr Lys Asn Ala Leu Ala Ile Ala Val Ala
 245 250 255
 Thr Asp Tyr Thr Phe Pro Gln Ala Glu Lys Val Lys Glu Phe Leu Lys
 260 265 270
 Asp Pro Ser Lys Phe Val Val Ala Ala Ala Ala Val Ser Ala Asp Ala
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 Gly Gly Gly Ser Ala Gln Ala Gly Ala Ala Ala Lys Val Glu Glu Lys
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 Lys Glu Glu Ser Asp Glu Glu Asp Tyr Glu Gly Gly Phe Gly Leu Phe
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 ctagtgttgc agtcggttta tgataatgga tcagtcctca gtccagaggt tcttgatctt 720
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 aatgctttag ctattgctgt tgctactgac tacactttcc ctcaagcaga gaagggtcaag 900
 gaattcttaa aggatcccag caagtttggt gttgctgcag cggcagtgct tgcggatgca 960
 ggtggtggta gtgctcaagc tggagctgca gctaaggtag aggagaagaa gaagaatcag 1020
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<210> 7
 <211> 14
 <212> PRT
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<400> 7
 Gly Ser Ala Tyr Thr Lys Lys Gly Ala Thr Lys Gly Lys Thr
 Page 4

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<210> 8
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<212> PRT
<213> Potato virus A

<400> 8

Gly Ser Ala Tyr Thr Lys Ala Gly Ala Thr Lys Gly Lys Thr
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Gly Ser Ala Tyr Thr Ala Ala Gly Ala Thr Lys Gly Lys Thr
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Gly Ser Thr Lys Gly Lys Thr
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<210> 11
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ggcagtagcg cgggtgtatta 20

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<210> 23
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<212> DNA
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<220>
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<400> 23
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<210> 24
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<400> 24
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<210> 25
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<213> Artificial Sequence

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<210> 27

<211> 309

<212> DNA

<213> Nicotiana benthamiana

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180

agatgatgac atgggtttca gcttgtttga ttaagtctgt tgtttgtgat gatgtcactt

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<213> Nicotiana benthamiana

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Val Lys Glu Tyr Leu Glu Asp Pro Ser Lys Phe Ala Ala Val Ala Ala
20 25 30

Ala Pro Val Ala Ala Ala Gly Ser Gly Ala Ala Pro Ala Ala Ala Lys
35 40 45

Glu Glu Glu Lys Lys Asp Glu Pro Ala Glu Glu Ser Asp Asp Asp Met
50 55 60

Gly Phe Ser Leu Phe Asp
65 70