

01 11068.204-WO SQ listing ST25 13-FEB-2008.txt
SEQUENCE LISTING

<110> Novozymes A/S
Stephensen Lübeck, Peter
<120> Method for producing an antifungal peptide in a filamentous
fungal host cell
<130> 11068.204-WO
<160> 22
<170> PatentIn version 3.4
<210> 1
<211> 1554
<212> DNA
<213> Aspergillus oryzae

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1554

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 <213> Aspergillus oryzae
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 35 40 45

Tyr Asp Cys Leu Ala Ser Thr Phe Arg Gln Asp Tyr Pro Ala Asp Lys
 50 55 60

Leu Thr Val Tyr Phe Cys Val Ala Ser Arg Ser Asp Pro Gly Tyr Pro
 65 70 75 80

Thr Leu Gln Lys Leu Val Ser Asp Phe Pro His Ala Gly Ala Arg Ile
 85 90 95

Phe Ile Glu Glu Glu Asp Pro Leu Leu Gln Pro Asn Gly Glu Cys Val
 100 105 110

Tyr Asp Leu Gly Pro Asn Pro Lys Ile Arg Asn Met Ser Arg Ala Tyr
 115 120 125

Arg Glu Ala Lys Gly Asp Ile Val Trp Ile Ile Asp Cys Asn Val Trp
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Val Gly Lys Gly Val Cys Gly Arg Met Val Asp Arg Leu Cys Gly Leu
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Gly Ala Thr Ser Gly Lys Lys Tyr Lys Phe Val His His Leu Pro Leu
 165 170 175

Val Val Asp Val Thr Ser Gly Ala Ser Ser Thr Glu Glu Gln Asn Ala
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Leu Val Glu Ser Tyr Thr Asn Gly Asp Ala Asp Ser Asn Ser Asp Val
 195 200 205

Ser Ser Ala Pro Thr Ile Ser Lys His Glu Gln Gly Thr Leu Ala Thr
 210 215 220

Gly Gly Gly Arg Leu Glu Glu Leu Phe Leu Ser Ser Ser His Ala Lys
 225 230 235 240

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Met Tyr Thr Ala Ile Asn Thr Val Leu Ile Ala Pro Cys Ile Val Gly
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Lys Ser Asn Met Phe Arg Arg Ser His Leu Asp Tyr Leu Thr Thr Pro
260 265 270

Ser Pro Thr Asp Pro His Lys Arg Asn Pro Gly Ile Asp Tyr Phe Ser
275 280 285

Asp Asn Ile Cys Glu Asp His Leu Ile Gly Asp Leu Leu Trp Lys Asn
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Arg Val Arg Glu Glu Lys Glu Lys Gly Glu Arg Phe Gly Lys His Gly
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Met Val Phe Gly Asp Leu Ala Ile Gln Pro Val Gly Asn Met Ser Val
325 330 335

Gly Asp Tyr Ile Ala Arg Arg Val Arg Trp Leu Arg Val Arg Lys Phe
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Cys Ser Cys Tyr Gly Ala Trp Gly Val Thr Thr Ser Leu Ala Gln Phe
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Leu Gln Glu Lys Gly Phe Cys Cys Ala Thr Tyr Met Thr Thr Trp Thr
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Ala Phe Phe Ala Phe Phe Phe Leu Ser Leu Ala Val Trp Ile Leu Thr
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Asp Trp Thr Leu Tyr Ile Lys Leu His Ser Ala Lys Ser Val Glu Leu
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<213> *Aspergillus oryzae*

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gacatctgtt gggcatcaaa tacatataaa cctctataac atcccccccc accatcgcca 180
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| acctggcggc cttgagcgcc cagcacagct gcccgcaggc ctggatcgta gcgtcggcga | 480 |
| tcgactccga gcctgaagag gagggtggtt cgggatcgtg ccttttgcatt tttcctgcgg | 540 |
| cgaatgggaa tgaggggtatg tacttccttg tctctttttc tctctctttt tttttcttct | 600 |
| ggagagttaa ggttggttgt tttggggagg gtttcaggga gtggatgttt aggattagat | 660 |
| gggaaaggct aattgggtat ttcagaaatc ttgaacttcc tcctgggagt gctcactcag | 720 |
| ggtgagactc agctggatca ggctcagggt gcggtgtgta ttaaccaccg taatcactcg | 780 |
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| gttggggctg gtgctgatat ctccgttaag aatgatgctg ggtagatgc tgttttcctt | 900 |
| gctgagaggg ctgattggtc gactgaggag cagggcgagg agcaggatga ggtcgagggt | 960 |
| gaaatagagg ctgaggctga ggcacagaag gttcaaggcg atgctgggaa gatgtctaag | 1020 |
| gggagacagg tcgaggagtg gttgctgggt tcggagaagg gtggtgaatt ggaaactgg | 1080 |
| gctggggaga atgctcctgc tgctgcggag gtgtcgacgc aatgatttac gctgtttatt | 1140 |
| gtttttatag atctgttgga attggataga aaagtctctt atattttttt aacgatttca | 1200 |
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<220>
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| gtcgagccga gtgtaagcgt aggggctaca aagggtggaca ctgtgggtcc ttcgcaaacg | 120 |
| tcaactgttg gtgtgaaacc taactcgagt ctc | 153 |

<210> 6
 <211> 132
 <212> DNA
 <213> Artificial

<220>
 <223> Codon optimized sequence

| | |
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| tggtgtgaaa cc | 132 |

<210> 7
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 <212> PRT
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<220>

<223> heliomycin derivative

<400> 7

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<211> 7288

<212> DNA

<213> Artificial

<220>

<223> Complete sequence of expression plasmid

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| tcgtcaaggg atgcaagacc aaaccgttaa atttccggag tcaacagcat ccaagcccaa | 180 |
| gtccttcacg gagaaacccc agcgtccaca tcacgagcga aggaccacct ctaggcacgc | 240 |
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| ggccttttct gcaacgctga tcacgggcag cgatccaacc aacaccctcc agagtgacta | 360 |
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| accgattacg ttagggctga tatttacgta aaaatcgtca agggatgcaa gaccaaaccg | 660 |
| ttaaatttcc ggagtcaaca gcatccaagc ccaagtcctt cacggagaaa cccagcgtc | 720 |
| cacatcacga gcgaaggacc acctctaggc atcggacgca ccatccaatt agaagcagca | 780 |
| aagcgaacaa gcccaagaaa aaggtcggcc cgtcggcctt ttctgcaacg ctgatcacgg | 840 |
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| tccactcaac cacaatcac agtcgtcccc ggtaatttaa cggtcgcaga cggcaattta | 960 |
| acggcttctg cgaatcgctt ggattccccg cccctggccg tagagcttaa agtatgtccc | 1020 |
| ttgtcgatgc gatgtatcac aacatataaa tactggcaag ggatgccatg cttggagttt | 1080 |
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| tggggatcca ccatgcaatt taccaccatc ctctccatcg gtatcaccgt cttcggactg | 1200 |
| ggtatgtaca ccacccctt gcgtctgac tgtgacatat gtagctgact ggtcagccaa | 1260 |
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| cccaacgact aaatcaagag tatactctta ccggtccaata gatcgtcttc gcttcaaaat | 1980 |
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| gatgttcggg ttcagtaggt ctttgatatt tggaatcgcc ggctcgccgg atgactgat | 2880 |
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| gtagtagccg atattgagcc cgccgttctt gatcttgag gcaataatgt ccgactcgga | 3120 |
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| ggatttggtg aagaggcgga ggtctaacat acttcatcag tgactgccgg tctcgtatat | 3240 |
| agtataaaaa gcaagaaagg aggacagtgg aggcctggta tagagcagga aaagaaggaa | 3300 |
| gaggcgaagg actcacctc aacagagtgc gtaatcggcc cgacaacgct gtgcaccgtc | 3360 |

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| cacgaccagt | tcttgttgcg | tgggttgacg | gtgcgcccga | tgatgttggt | gactgtctcg | 3600 |
| cagaccatca | gggtctgcgg | gacagagggtc | ttgacgtaga | agacggcacc | ggctttgcgg | 3660 |
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| aaatcgacgc | tcaagtcaga | ggtggcgaaa | cccgaacagga | ctataaagat | accaggcggt | 5460 |

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| aattaaatga ttttcgaaat cgaacttgac attggaacga acatcagaaa tagctttaag | 7140 |
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