GENESEQ™ on STN®

GENESEQ™ (file DGENE) covers peptide and nucleic acid sequences from the basic patent publications of 41 authorities of the Derwent World Patents Index® (DWPI™).

DGENE offers three sequence searching methods
- BLAST for advanced similarity searching based on NCBI BLAST® algorithm
- GETSIM for advanced similarity searching based on FASTA algorithm
- GETSEQ for simple fragment or motif sequence queries

DGENE records also provide
- English abstracts written per sequence by Thomson Scientific experts
- Enhanced patent titles and bibliographic data from DWPI
- Integrated Patent Family and Legal Status display
- Full-text links to Esp@cenet and the USPTO

Biosequences in DGENE
- Peptide and nucleic acid sequences from 1981 to date
- From the basic patent publications of 41 authorities of DWPI (see chart)
- Organism and sequence length
- Feature tables for modifications and other features

GENESEQ™ is produced by Thomson Scientific and is provided on STN® as file DGENE in association with FIZ Karlsruhe. STN is operated by FIZ Karlsruhe and CAS worldwide and is represented in Japan by JAICI.
Title: An isolated polypeptide (I) possessing beta-(1,3) exoglucanase activity for improvement of plant resistance to fungal phytopathogens and to promote growth

Inventor: Frick M M; Huang T Y; Cheng K J; Lu Z; Laroche A J; Huang H C

Patent Assignee: (MIAC) CANADA MIN AGRIC & AGRI-FOOD CANADA

Patent Info: CA 2325774 A1 20010610 86p

Application Info: CA 2000-2325774 20001208

Priority Info: US 1999-170168P 19991210

Pat. Seq. Loc. Claim tsig 2

Data entry Date: 10 Dec 2001 (first entry)

Document Type: Patent

Language: English

Other Source: 2001-409063 [44]

Cross References: N-PEDB: AA18016

Description: Coniothyrium minitans beta-(1,3) exoglucanase, cbeg1. Beta-(1,3) exoglucanase gene; cbeg1; laminarin; plant resistance; fungal phytopathogen; microbial transgenic strategy; feed digestion; forage feed; industrial application; pulp bleaching; monocot; dicot; antifungal; growth promoter; EC 3.2.1.58.

Organism: Coniothyrium minitans.

Abstract: The invention relates to nucleotide sequence of a novel beta-(1,3) exoglucanase gene denoted as cbeg1 of the soil borne fungus Coniothyrium minitans. Beta-(1,3) exoglucanase (EC 3.2.1.58) is an enzyme that catalyses the successive hydrolysis of beta-D-glucose units from the non-reducing ends of 1,3-beta-D-glucans, releasing alpha-glucose. cbeg1 is specific for the substrate laminarin. cbeg1 sequences are useful for improvement of plant resistance to fungal phytopathogens or use in ruminant microbial transgenic strategies to improve feed digestion and nutritive carbohydrate availability from forage feed. cbeg1 is also useful for use in high temperature industrial applications such as bleaching of pulp. cbeg1 is useful as an antifungal in dicots and to promote plant growth in monocots and dicots. The present sequence is Coniothyrium minitans cbeg1 protein.

Amino Acid Counts: 73 A; 19 R; 61 N; 39 D; 0 B; 11 C; 33 Q; 18 E; 0 Z; 77 G; 13 H; 52 I; 50 L; 31 K; 14 M; 25 F; 42 P; 68 S; 59 T; 16 W; 29 Y; 55 V; 0 Others

Sequence Length: 785

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151 ialidapny dqgkpgwts tnvfrtqnrn fvidltpipa tsqagihwp
201 aqrsqtdsv kigmvaans vhgifieng sgghltidet vgglhqngvq
251 nqqftmknnv ismavqvgi lwnqwlkg itisdcstaa fmsksikdans
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Feature Table:

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