

Title (en)
POLYPHENOL OXIDASE.

Title (de)
POLYPHENOL OXIDASE.

Title (fr)
POLYPHENOL OXYDASE.

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Abstract (en)
[origin: WO9315599A1] The present invention describes the cloning and sequencing of plant Polyphenol Oxidase (PPO) cDNAs which has subsequently permitted their use to genetically transform plants to achieve a variety of desired phenotypes.

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Citation (search report)

- [X] WO 8908145 A1 19890908 - BIOSOURCE GENETICS CORP [US]
- [E] WO 9302195 A1 19930204 - COMMW SCIENT IND RES ORG [AU]
- [E] WO 9403607 A1 19940217 - KEYGENE NV [NL], et al
- [PX] HUNT, M.D., ET AL.: "CDNA CLONING AND EXPRESSION OF POTATO POLYPHENOL OXIDASE", PLANT MOLECULAR BIOLOGY, vol. 21, no. 1, pages 59 - 68, XP000929690, DOI: doi:10.1007/BF00039618
- [PX] SHAHAR, T., ET AL.: "THE TOMATO 66.3KD POLYPHENOLOXIDASE GENE: MOLECULAR CLONING IDENTIFICATION AND DEVELOPMENTAL EXPRESSION", THE PLANT CELL, vol. 4, no. 12, pages 135 - 147
- [PX] HUNT M D ET AL: "A FUNCTIONAL ANALYSIS OF POLYPHENOL OXIDASE PPO IN SOLANUM-TUBEROSUM USING SENSE AND ANTISENSE GENES.", ANNUAL MEETING OF THE AMERICAN SOCIETY OF PLANT PHYSIOLOGISTS, PITTSBURGH, PENNSYLVANIA, USA, AUGUST 1-5, 1992. PLANT PHYSIOL (BETHESDA) 99 (1 SUPPL.). 1992. 88. CODEN: PLPHAY ISSN: 0032-0889
- [PX] CHEMICAL ABSTRACTS, vol. 120, no. 13, 28 March 1994, Columbus, Ohio, US; abstract no. 157197, YU, HAIFENG: "Cloning, characterization and expression of tomato polyphenol oxidases" & (1992) 160 PP. AVAIL.: UNIV. MICROFILMS INT., ORDER NO. DA9236003 FROM: DISS. ABSTR. INT. B 1993, 53(7), 3326
- [PX] DATABASE EMBL SEQUENCE 13 June 1992 (1992-06-13), HUNT, M. ET AL.: "POTATO POLYPHENOL OXIDASE MRNA, 3' END" & PLANT MOLECULAR BIOLOGY, vol. 21, pages 59 - 68
- [PX] DATABASE EMBL SEQUENCE 13 June 1992 (1992-06-13), HUNT, M., ET AL.: "POTATO POLYPHENOL OXIDASE MRNA, 3' END" & PLANT MOLECULAR BIOLOGY, vol. 21, pages 59- - 68
- [A] STEFFENS, J.C., ET AL.: "CHARCTERIZATION OF GLANDULAR TRICHOME AND PLASTID POLYPHENOL OXIDASES OF POTATO", MOLECULAR BIOLOGY OF THE POTATO (M.E.VAYDA ET AL. EDS.) CAB INTERNATIONAL. CHAPTER 9, pages 103 - 112
- [A] STEFFENS, J.C., ET AL.: "CLONING OF GLANDULAR TRICHOME POLYPHENOL OXIDASE", PLANT PHYSIOLOGY SUPPLEMENT, vol. 93, no. 1, pages 15
- [A] CARY, J.W., ET AL.: "CLONING AND CHARACTERIZATION OF A GENE PRESUMED TO ENCODE POLYPHENOL OXIDASE", PLANT PHYSIOLOGY SUPPLEMENT, vol. 93, no. 1, pages 41
- [A] YU, H., ET AL.: "CLONING OF TOMATO POLYPHENOL OXIDASE CDNAS AND ENZYME CONSERVATION BETWEEN POLYPHENOL OXIDASES AND TYROSINASES", PLANT PHYSIOLOGY SUPPLEMENT, vol. 96, no. 1, pages 5
- [A] LAGRIMINI L M: "WOUND-INDUCED DEPOSITION OF POLYPHENOLS IN TRANSGENIC PLANTS OVEREXPRESSING PEROXIDASE.", PLANT PHYSIOL (BETHESDA) 96 (2). 1991. 577-583.
- [A] ROTHSTEIN, S.J., ET AL.: "INHIBITION OF NOPALINE SYNTHASE AND PEROXIDASE EXPRESSION IN TOBACCO EXPRESSING ANTISENSE RNA", UCLA SYMP. NEW SER.;PLANT GENE TRANSFER, vol. 129, pages 135 - 141
- See references of WO 9315599A1

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