

Title (en)  
TRANSGENIC TOMATO PLANTS CONTAINING A FUSARIUM RESISTANCE GENE

Title (de)  
TRANSGENE TOMATENPFLANZEN MIT EINEM FUSARIUM-RESISTENZGEN

Title (fr)  
PLANTS DE TOMATES TRANSGENIQUES CONTENANT UN GENE DE RESISTANCE AU FUSARIUM

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Application  
**EP 96915322 A 19960415**

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Abstract (en)  
[origin: WO9632007A1] The invention provides genes from the I2 Fusarium resistance locus of tomato belonging to a multigene family herein designated I2C. The DNA molecules of the invention are useful as a tomato resistance gene to plant vascular diseases caused by Fusarium pathogens, particularly Fusarium oxysporum f.sp. lycopersici race 2, or as probes for breeding Fusarium-resistant tomato lines or for screening of new diseases in plants of the Solanaceae family. Further provided are Fusarium-resistant tomato lines transformed by an I2C resistance gene of the invention.

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**C07K 14/415** (2013.01); **C12N 15/8282** (2013.01)

Citation (search report)  
• [A] WO 9505731 A1 19950302 - CORNELL RES FOUNDATION INC [US]  
• [E] WO 9706259 A2 19970220 - KEYGENE NV [NL], et al  
• [OX] WIT DE P J G M: "COLD SPRING HARBOR CONFERENCE ON 'MOLECULAR BIOLOGY OF DISEASE RESISTANCE GENES IN PLANTS' MEETING HELD APRIL 9-12, 1995", MOLECULAR BREEDING: NEW STRATEGIES IN PLANT IMPROVEMENT, vol. 1, 1995, pages 203 - 206, XP002006909  
• [X] DROUIN, G., ET AL.: "A plant processed pseudogene", NATURE, vol. 328, 6 August 1987 (1987-08-06), pages 557 - 558, XP002063501  
• [X] MINDRINOS M ET AL: "THE A. THALIANA DISEASE RESISTANCE GENE RPS2 ENCODES A PROTEIN CONTAINING A NUCLEOTIDE-BINDING SITE AND LEUCINE-RICH REPEATS", CELL, vol. 78, 23 September 1994 (1994-09-23), pages 1089 - 1099, XP002028747  
• [Y] TANKSLEY S D ET AL: "CHROMOSOME LANDING: A PARADIGM FOR MAP-BASED GENE CLONING IN PLANTS WITH LARGE GENOMES", TRENDS IN GENETICS, vol. 11, no. 2, February 1995 (1995-02-01), pages 63 - 68, XP002006911  
• [Y] NAOMI ORI ET AL: "A GENOMIC SEARCH FOR THE GENE CONFERRING RESISTANCE TO FUSARIUM WILT IN TOMATO", EUPHYTICA, vol. 79, no. 3, 1 January 1994 (1994-01-01), pages 201 - 204, XP000560824  
• [A] CHASAN R: "PLANT-PATHOGEN ENCOUNTERS IN EDINBURGH", PLANT CELL, vol. 6, 1 October 1994 (1994-10-01), pages 1332 - 1341, XP000574586 & 7TH INTERNATIONAL SYMPOSIUM ON MOLECULAR PLANT-MICROBE INTERACTIONS, HELD IN EDINBURGH, JUNE 26-JULY 1, 1994.  
• [A] TANKSLEY S D: "RFLP MAPPING IN PLANT BREEDING: NEW TOOLS FOR AN OLD SCIENCE", BIO/TECHNOLOGY, vol. 7, no. 3, 1 March 1989 (1989-03-01), pages 257 - 264, XP000368711  
• [A] LAMB C J ET AL: "EMERGING STRATEGIES FOR ENHANCING CROP RESISTANCE TO MICROBIAL PATHOGENS", BIO/TECHNOLOGY, vol. 10, November 1992 (1992-11-01), pages 1436 - 1445, XP002032892  
• [A] KEEN, N.T.: "The molecular biology of disease resistance", PLANT MOLECULAR BIOLOGY, vol. 19, 1992, pages 109 - 122, XP002063316  
• [A] ELZEN VAN DEN P J M ET AL: "VIRUS AND FUNGAL RESISTANCE: FROM LABORATORY TO FIELD", PHILOSOPHICAL TRANSACTIONS. ROYAL SOCIETY OF LONDON BIOLOGICAL SCIENCES, vol. 342, 1993, pages 271 - 278, XP002032895  
• See references of WO 9632007A1

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