

Title (en)

ISOCHORISMATE SYNTHASE AND ITS USE FOR THE INDUCTION OF RESISTANCE IN PLANTS

Title (de)

ISOCHORISMATE SYNTHASE UND SEINE VERWENDUNG ZUR RESISTENZ-INDUKTION IN PFLANZEN

Title (fr)

GENES DE LA VOIE DE L'ACIDE SALICYLIQUE ET LEUR UTILISATION POUR INDUIRE LA RESISTANCE CHEZ LES VEGETAUX

Publication

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Application

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Abstract (en)

[origin: WO9950423A2] This invention describes a method to induce pathogen resistance in plants, characterized in that plants are transformed with an expression cassette harboring a gene coding for an isochorismate synthase. More specifically, this method is characterized in that the gene coding for isochorismate synthase is selected from a group consisting of entC, orfA, pchA and ICS, this last gene preferably the ICS gene from Catharantus roseus. Another embodiment of the invention is a method according to the method described above, characterized in that plants are additionally transformed with an expression cassette harboring a gene coding for an isochorismate pyruvate lyase, preferably on the same expression cassette as the gene coding for isochorismate synthase. The gene coding for isochorismate pyruvate lyase is preferably selected from the group consisting of orfD and pchB. A further aspect of the invention is a protein having isochorismate synthase activity which is isolated from Catharantus roseus. Still a further aspect of the invention is the nucleotide sequence comprising the 5' regulatory region which is naturally found to regulate the expression of the ICS gene in Catharantus roseus.

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