Title (en)

ISOFLAVONOID METHYLATION ENZYME

Title (de)

ENZYME DER ISOFLAVONOIDMETHYLIERUNG

Title (fr)

ENZYME DE METHYLATION DU GROUPE DES ISOFLAVONOIDES

Publication

EP 1183376 A1 20020306 (EN)

Application

EP 00932467 A 20000515

Priority

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- US 13502699 P 19990520

Abstract (en)

[origin: WO0071736A1] Methods of genetically manipulating biologically active 4'-O-methylated isoflavonoids have been found based upon the regiospecifity of isoflavone 7-OMT in vivo. Upon transformation and expression of an isoflavonoid O-methyltransferase gene, up-regulation of IOMT in the transgenic plants can be used to increase the accumulation of 4'-O-methylated isoflavonoid phytolalexins, providing for increased disease resistance to the plant. Similar methods can be used to increase accumulation of 4'-O-methylated isoflavonoid nutraceuticals in plants. For down-regulation of IOMT in plants that naturally make 4'O-isoflavonoid phytoalexins and 4'-O-methylated isoflavonoid nutraceuticals, IOMT gene sequences can be transformed in the antisense orientation.

IPC 1-7

C12N 15/82; C12N 15/29; C12N 9/10; C07K 16/16; A01H 5/00

IPC 8 full level

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CPC (source: EP)

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