

Title (en)

USE OF PALATINASE AND TREHALULASE SEQUENCES AS NUTRITIVE MARKERS IN TRANSFORMED CELLS

Title (de)

VERWENDUNG VON PALATINASE- UND TREHALULASE-SEQUENZEN ALS NUTRITIVE MARKER IN TRANSFORMIERTEN ZELLEN

Title (fr)

UTILISATION DE SEQUENCES DE PALATINASE ET DE TREHALULASE EN TANT QUE MARQUEURS NUTRITIFS DANS DES CELLULES TRANSFORMEES

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Application

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Abstract (en)

[origin: WO0159131A2] The invention relates to recombinant nucleic acid molecules containing a DNA sequence that encodes a protein with the enzymatic activity of a palatinose hydrolase, also referred to as palatinase, or a trehalulose hydrolase, also referred to as trehalulase. The invention further relates to the use of said nucleic acid molecules as selection markers in transformed cells. The invention particularly relates to recombinant nucleic acid molecules containing a DNA sequence that encodes a protein with the enzymatic activity of a palatinase or a trehalulase, said DNA sequence being under the control of regulatory sequences of a promoter that is active in plants. The invention further relates to vectors and host cells containing the recombinant nucleic acid molecules according to the invention. The invention further provides methods for producing transformed plant cells and plants using the recombinant nucleic acid molecules and vectors. The invention also relates to transgenic plants, their harvest products and propagation material as well as transgenic plant cells that contain the nucleic acid molecules or vectors according to the invention or that are produced by the methods according to the invention. The invention particularly relates to the use of DNA sequences that encode a protein with the enzymatic activity of a palatinose hydrolase or a trehalulose hydrolase as nutritive selection markers in plant cells for selecting transformed plant cells and plants. The invention also relates to a method for selecting microorganisms on a palatinose or trehalulose containing medium.

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