

Title (en)  
NUCLEOTIDE SEQUENCE CODING FOR A MANNITOL 2-DEHYDROGENASE AND METHOD FOR THE PRODUCTION OF D-MANNITOL

Title (de)  
FÜR EINE MANNITOL-2-DEHYDROGENASE CODIERENDE NUKLEOTIDSEQUENZ SOWIE VERFAHREN ZUR HERSTELLUNG VON D-MANNITOL

Title (fr)  
SEQUENCE NUCLEOTIDIQUE CODANT POUR UNE MANNITOL-2-DESHYDROGENASE ET PROCEDE DE PRODUCTION DE D-MANNITOL

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Application  
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Abstract (en)  
[origin: WO03095635A2] The invention relates to a nucleotide sequence coding for the mannitol 2-dehydrogenase and a method for producing D-mannitol. Previously known biocatalytic methods for producing D-mannitol yield only small production rates due to the small number of specific activities of mannitol 2-dehydrogenases used for transforming D-fructose into D-mannitol. D-mannitol production can be improved by supplying a nucleotide sequence which codes for a mannitol 2-dehydrogenase having a higher specific activity. Mannitol production can be increased in a particular manner by creating a regeneration system for reduction equivalents by introducing and/or strengthening a formiate dehydrogenase in a microorganism.

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