

Title (en)  
D-GLUCONOLACTONE OXIDASE GENE AND METHOD FOR PRODUCING RECOMBINANT D-GLUCONOLACTONE OXIDASE

Title (de)  
GEN DER D-GLUKONOLAKTONOXIDASE UND VERFAHREN ZUR HERSTELLUNG VON REKOMBINANTER D-GLUKONOLAKONOXIDASE

Title (fr)  
GENE DE D-GLUCONOLACTONE OXYDASE ET PROCEDE DE PRODUCTION DE D-GLUCONOLACTONE OXYDASE RECOMBINEE

Publication  
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Application  
**EP 00959277 A 20000818**

Priority

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Abstract (en)  
[origin: WO0114574A1] The present invention is directed to the isolation of nucleic acid molecules which encode the enzyme D-gluconolactone oxidase (D-GLO) useful in the production of erythorbic acid by the conversion of D-gluconolactone. Various modifications of such nucleic acid molecules are contemplated including the encoded proteins which retain the enzymatic activity of naturally occurring D-GLO. Recombinant methods of producing D-gluconolactone oxidase utilizing the nucleic acids of this invention in various host cells transformed by appropriate expression vectors are preferred. Methods of utilizing the D-GLO of the present invention in processes for the conversion of glucose and specifically the conversion of D-gluconolactone to erythorbic acid are also contemplated.

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Citation (search report)

- [X] EP 0401704 A2 19901212 - MITSUBISHI RAYON CO [JP]
- [A] KIM S-T ET AL: "D-Arabinose dehydrogenase and its gene from *Saccharomyces cerevisiae*", BIOCHIMICA ET BIOPHYSICA ACTA. PROTEIN STRUCTURE AND MOLECULAR ENZYMOLOGY, ELSEVIER, AMSTERDAM., NL, vol. 1429, no. 1, 8 December 1998 (1998-12-08), pages 29 - 39, XP004278563, ISSN: 0167-4838
- See references of WO 0114574A1

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