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

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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 occuring 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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