

ABSTRACT

Polypeptide having D-lactate Dehydrogenase Activity, Polynucleotide Encoding the Polypeptide, and Process for Production of D-lactic acid

5 Highly productive D-lactic acid fermentation is achieved by using a transformant obtained by introducing into a host cell a polynucleotide encoding a polypeptide according to any one of the following (A) to (C) in such a manner that the polypeptide is expressed, which polypeptide has a D-lactate dehydrogenase activity higher than those of conventional polypeptides: (A) a polypeptide having the amino acid sequence shown in SEQ ID NO:1 or 2; (B) a polypeptide having the same amino acid sequence as shown in SEQ ID NO:1 or 2 except that one or several amino acids are substituted, deleted, inserted and/or added, which polypeptide has a D-lactate dehydrogenase activity; and (C) a polypeptide having an amino acid sequence which has a sequence identity of not less than 80% to the amino acid sequence shown in SEQ ID NO:1 or 2, which polypeptide has a D-lactate dehydrogenase activity.

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