

Prokaryotic Galactose dehydrogenase, Recombinant

Cat. No. NATE-0840

Lot. No. (See product label)

Introduction

Description In enzymology, a galactose 1-dehydrogenase (EC 1.1.1.48) is an enzyme that catalyzes the chemical reaction: D-galactose + NAD⁺ → D-galactono-1,4-lactone + NADH + H⁺. Thus, the two substrates of this enzyme are D-galactose and NAD⁺, whereas its 3 products are D-galactono-1,4-lactone, NADH, and H⁺. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with NAD⁺ or NADP⁺ as acceptor. This enzyme participates in galactose metabolism.

Synonyms D-galactose:NAD⁺ 1-oxidoreductase; D-galactose dehydrogenase; beta-galactose dehydrogenase; NAD⁺-dependent D-galactose dehydrogenase; galactose 1-dehydrogenase; EC 1.1.1.48; Galactose dehydrogenase

Product Information

Source Microorganism

Form Liquid

EC Number EC 1.1.1.48

CAS No. 9028-54-0

Molecular Weight ~ 36.6kD

Activity ~ 275 U/mg protein

Unit Definition One unit is defined as the amount of enzyme required to convert one μmole of D-galactose to D-galactonate per minute in the presence of NAD⁺ in Tris-HCl buffer at pH 8.6 and 25°C.

Storage and Shipping Information

Storage 4°C