

β-Galactose Dehydrogenase S from Pseudomonas fluorescens, Recombinant

Cat. No. NATE-1710

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.

Applications

β-Galactose Dehydrogenase S has been used in the colorimetric microassay method to determine the level of galactose and galactose-1-phosphate in blood.

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

Species

Pseudomonas fluorescens

Source

E. coli

Form

Suspension in 3.2 M ammonium sulfate solution, pH approximately 6.

EC Number

EC 1.1.1.48

Activity

80 U/mg protein

Contaminants

<0.01% ADH, <0.01% β-galactosidase, <0.1% LDH, <0.05% NADH oxidase

Notes

INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.

Storage and Shipping Information

Storage

Store at -20°C.