

Native *Pseudomonas fluorescens* Galactose 1-Dehydrogenase

Cat. No. NATE-0980

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 Use Galactose 1-Dehydrogenase in diagnostic tests for the determination of total galactose.

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

Product Information

Source *Pseudomonas fluorescens*

Appearance White suspension in ammonium sulfate solution, 3.2 mol/l; EDTA, 1 mmol/l; pH approximately 6

CAS No. 9028-54-0

Activity >5 U/mg

Contaminants Alcohol dehydrogenase: <0.01 β-Galactosidase: <0.01 Lactate dehydrogenase: <0.5 "NADH-oxidase": <0.1

Storage and Shipping Information

Stability At +2 to +8°C within specification range for 12 months.