

## 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<sup>+</sup> → D-galactono-1,4-lactone + NADH + H<sup>+</sup>. Thus, the two substrates of this enzyme are D-galactose and NAD<sup>+</sup>, whereas its 3 products are D-galactono-1,4-lactone, NADH, and H<sup>+</sup>. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with NAD<sup>+</sup> or NADP<sup>+</sup> 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<sup>+</sup> 1-oxidoreductase; D-galactose dehydrogenase; beta-galactose dehydrogenase; NAD<sup>+</sup>-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.