

Mannitol dehydrogenase from *Pseudomona fluorescens*, Recombinant

Cat. No. NATE-1114

Lot. No. (See product label)

Introduction

Description

In enzymology, a mannitol 2-dehydrogenase (EC 1.1.1.67) is an enzyme that catalyzes the chemical reaction: D-mannitol + NAD⁺ ⇌ D-fructose + NADH + H⁺. Thus, the two substrates of this enzyme are D-mannitol and NAD⁺, whereas its 3 products are D-fructose, 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 fructose and mannose metabolism.

Synonyms

mannitol dehydrogenase; D-mannitol dehydrogenase; mannitol dehydrogenase; mannitol 2-dehydrogenase; EC 1.1.1.67; 9001-65-4

Product Information

Source

Pseudomona fluorescens

Form

Liquid

EC Number

EC 1.1.1.67

CAS No.

9001-65-4

Molecular Weight

~ 56.7kD

Activity

~ 40 U/mg protein

Unit Definition

One Unit is defined as the amount of enzyme required to produce one μmole of NADH from NAD⁺ in the presence of D-mannitol in Tris-HCl buffer at pH 8.6 and 25°C.

Storage and Shipping Information

Storage

4°C