

Native *Enterobacter aerogenes* myo-Inositol Dehydrogenase

Cat. No. NATE-0467

Lot. No. (See product label)

Introduction

Description

In enzymology, an inositol 2-dehydrogenase (EC 1.1.1.18) is an enzyme that catalyzes the chemical reaction: myo-inositol + NAD⁺ ↔ 2,4,6/3,5-pentahydroxycyclohexanone + NADH + H⁺. Thus, the two substrates of this enzyme are myo-inositol and NAD⁺, whereas its 3 products are 2,4,6/3,5-pentahydroxycyclohexanone, 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 inositol metabolism and inositol phosphate metabolism.

Synonyms

myo-inositol 2-dehydrogenase; myo-inositol:NAD⁺ oxidoreductase; inositol dehydrogenase; myo-inositol dehydrogenase; EC 1.1.1.18; 9028-25-5

Product Information

Source

Enterobacter aerogenes

Form

Lyophilized powder containing buffer salts and stabilizers.

EC Number

EC 1.1.1.18

CAS No.

9028-25-5

Activity

> 10 units/mg protein

Unit Definition

One unit will convert 1.0 μmole of myo-inositol and β-NAD to scyllo-inosose and β-NADH per min at pH 9.0 at 25°C.

Storage and Shipping Information

Storage

−20°C