

myo-Inositol dehydrogenase from *Bacillus subtilis*, Recombinant

Cat. No. NATE-1100

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 Bacillus subtilis

Form Liquid

EC Number EC 1.1.1.18

CAS No. 9028-25-5

Molecular Weight ~ 39kD

Activity ~ 80 U/mg protein

Unit Definition One Unit is defined as the amount of enzyme required to produce one μmole of scyllo-inosose and NADH from myo-inositol and NAD⁺ per minute in Glycylglycine buffer at pH 9.6 and 25°C.

Storage and Shipping Information

Storage 4°C