

## 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<sup>+</sup> ↔ 2,4,6/3,5-pentahydroxycyclohexanone + NADH + H<sup>+</sup>. Thus, the two substrates of this enzyme are myo-inositol and NAD<sup>+</sup>, whereas its 3 products are 2,4,6/3,5-pentahydroxycyclohexanone, 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 inositol metabolism and inositol phosphate metabolism.

#### Synonyms

myo-inositol 2-dehydrogenase; myo-inositol:NAD<sup>+</sup> 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<sup>+</sup> per minute in Glycylglycine buffer at pH 9.6 and 25°C.

### Storage and Shipping Information

#### Storage

4°C