Creative Enzymes®

N-Acylmannosamine 1-Dehydrogenase from Pseudomonas sp., Recombinant

Cat. No. NATE-0470

Lot. No. (See product label)

Introduction

Description	In enzymology, a N-acylmannosamine 1-dehydrogenase (EC 1.1.1.233) is an enzyme that catalyzes the chemical reaction:N-acyl-D-mannosamine + NAD+↔ N-acyl-D-mannosaminolactone + NADH + H+. Thus, the two substrates of this enzyme are N-acyl-D-mannosamine and NAD+, whereas its 3 products are N-acyl-D-mannosaminolactone, 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.
Synonyms	N-acylmannosamine 1-dehydrogenase; EC 1.1.1.233; N-acylmannosamine dehydrogenase; N-acetyl-D-mannosamine dehydrogenase; N-acyl-D-mannosamine dehydrogenase; N-acylmannosamine dehydrogenase; 117698-08-5

Product Information

Species	Pseudomonas sp.
Source	E. coli
Form	lyophilized powder; Powder also contains bovine albumin and sucrose.
EC Number	EC 1.1.1.233
CAS No.	117698-08-5
Molecular Weight	mol wt ~120 kDa (gel filtration)
Activity	> 45 units/mg protein
Buffer	0.1 M Tris-HCl, pH 8.2: soluble 5 mg/mL
Unit Definition	One unit will oxidize 1.0 µmole of N-acetyl-D-mannosamine to N-acetyl-D-mannosaminolactone per minute at pH 8.2 at 37°C in the presence of NAD.

Storage and Shipping Information

Storage	−20°C