

alcohol dehydrogenase (nicotinoprotein)

Cat. No. EXWM-0464

Lot. No. (See product label)

Introduction

Description

Contains Zn²⁺. Nicotinoprotein alcohol dehydrogenases are unique medium-chain dehydrogenases/reductases (MDR) alcohol dehydrogenases that have a tightly bound NAD⁺/NADH cofactor that does not dissociate during the catalytic process. Instead, the cofactor is regenerated by a second substrate or electron carrier. While the in vivo electron acceptor is not known, N,N-dimethyl-4-nitrosoaniline (NDMA), which is reduced to 4-(hydroxylamino)-N,N-dimethylaniline, can serve this function in vitro. The enzyme from the Gram-positive bacterium *Amycolatopsis methanolica* can accept many primary alcohols as substrates, including benzylalcohol.

Synonyms

NDMA-dependent alcohol dehydrogenase; nicotinoprotein alcohol dehydrogenase; np-ADH; ethanol:N,N-dimethyl-4-nitrosoaniline oxidoreductase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.1.99.36

Reaction

ethanol + acceptor = acetaldehyde + reduced acceptor

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.