Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.