Creative Enzymes®

Native Alcohol dehydrogenase

Cat. No. NATE-0034

Lot. No. (See product label)

Introduction

Description	Alcohol dehydrogenases (ADH) are a group of dehydrogenase enzymes that occur in many organisms and facilitate the interconversion between alcohols and aldehydes or ketones with the reduction of nicotinamide adenine dinucleotide (NAD+ to NADH). In Humans and many other animals, they serve to break down alcohols that otherwise are toxic, and they also participate in geneRation of useful aldehyde, ketone, or alcohol groups during biosynthesis of various metabolites. In yeast, plants, and many bacteria, some alcohol dehydrogenases catalyze the opposite reaction as part of fermentation to ensure a constant supply of NAD+.
Synonyms	aldehyde reductase; ADH; alcohol dehydrogenase (NAD); aliphatic alcohol dehydrogenase; ethanol dehydrogenase; NAD-dependent alcohol dehydrogenase; NAD-specific aromatic alcohol dehydrogenase; NADH-alcohol dehydrogenase; NADH-aldehyde dehydrogenase; primary alcohol dehydrogenase; yeast alcohol dehydrogenase; EC 1.1.1.1

Product Information

EC Number	EC 1.1.1.1
CAS No.	9031-72-5
Optimum pH	pH range is about 8-9 with optimum around pH 8,0.
Thermal stability	Activity of the enzyme as a function of time at different temperature-(open circles: 80°C; closed circles: 85°C; open squares: 94°C)
Optimum temperature	The enzyme in relatively active at broad temperature range (50-65°C)with optimum around 60°C.
Unit Definition	One unit (U) of enzyme activity is defined as the absorbance measured after incubation for 10 min at 340nm (NAD+ turning into NADH) units (U) are defined as mmol/min of product released.