Creative Enzymes®

β-Nicotinamide-Adenine Dinucleotide, Reduced Form (β-NADH)

Cat. No. NATE-0786

Lot. No. (See product label)

Introduction

Description	NADH is a coenzyme that functions as a regenerating electron donor in catabolic processes including glycolysis, beta-oxidation and the citric acid cycle (Krebs cycle, TCA cycle). It participates in cell signaling events as well, for example as a substrate for the poly (ADP-ribose) polymerases (PARPs) during the DNA damage response. The NAD+/NADH dependent sirtuins play key roles in stress responses during events involving energy metabolism, with implications in cancer biology, diabetes and neurodegenerative disease.
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; β-NADH

Product Information

EC Number	EC 1.1.1.1
CAS No.	606-68-8
Molecular Weight	709.41
Purity	Dertermined by decrease in absorbance at 340 nm on enzymatic oxidation with ADH* at pH 10.0 > 95% *ADH = Alcohol dehydrogenase (yeast) (EC 1.1.1.1.)
Structure	C21H27N7O14P2Na2
Specificity	Water content: < 8% by Karl Fischer; Sodium content: 6.5 ± 1.5% by flame photometyl

Storage and Shipping Information

Storage	Keep tightly stoppered in the dark below 5°C. Moisture will reduce the purity. For prolonged storage, keep below-20°C. Unstable in acids, but relatively stable at pH 10-11.