Creative Enzymes®

Native Bacillus stearothermophilus Diaphorase 1

Cat. No. NATE-1901

Lot. No. (See product label)

Introduction

Description	Diaphorase catalyzes the reaction of a reduced di- or tri-phosphopyridine nucleotide hydrogen donor with a hydrogen acceptor, usually a dye in the leucoform.
Applications	The enzyme is useful for the measurement of various dehydrogenase reactions in visible spectral range.
Synonyms	Diaphorase 1; Di-1; EC 1.6.99 -

Product Information

Source	Bacillus stearothermophilus
Appearance	Lyophilized
EC Number	EC 1.6.99.-
Molecular Weight	ca. 30,000
Specific Activity	more than 1,000 U/mg protein
Contaminants	(as Diaphorase activity = 100 %) Adenylate kinase: < 0.01 %; NADH oxidase: < 0.01 %.
pH Stability	7.5 - 9.5
Optimum pH	8
Thermal stability	No detectable decrease in activity up to 50 °C.
Unit Definition	One unit of activity is defined as the amount of Di-1 that reduces 1 μmol of DCIP per minute at 30 °C.
Reaction	NAD(P)H + Acceptor(ox.) + H+ ←→ NAD(P)+ + Acceptor(red.)

Storage and Shipping Information

Storage	Stable at -20 to 5 °C for at least one year.