

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** $\text{NAD(P)H} + \text{Acceptor(ox.)} + \text{H}^+ \leftrightarrow \text{NAD(P)}^+ + \text{Acceptor(red.)}$

Storage and Shipping Information

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