

**Diaphorase from Clostridium sp.**

**Product Code:** 172619

**EC no:** 1.6.99

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**SKU:** 172619

**Category:** [Enzymes](#)

## PRODUCT DESCRIPTION

### SPECIFICATIONS:

#### EC 1.6.99

**Product name:** NAD(P)H: (acceptor) oxidoreductase

**Appearance:** Yellowish amorphous powder, lyophilized

**Activity:** Grade III, 30 U/mg-solid or more (containing approx. 15% stabilizers)

**Contaminants:** Myokinase:  $\leq 5.0 \times 10^{-1}\%$ , NAD(P)H oxidase:  $\leq 5.0 \times 10^{-1}\%$

**Stabilizers:** FMN, NAD(P)H

**Stability:** Stable at - 20 °C for at least one year

**Molecular weight:** Approx. 24,000

**Michaelis constants:**  $2.0 \times 10^{-5}$  M (NADH),  $6.0 \times 10^{-6}$  M (NADPH)

**Structure:** One mol of FMN per mol of enzyme

**Inhibitors:** N-Ethylmaleimide

**Optimum pH:** 8.5

**Optimum temperature:** 50°C

**pH Stability:** pH 7.5 (30°C, 3hr)

**Thermal stability:** Below 30 °C (pH 7.5, 30min)

**Substrate specificity:** Either NADH or NADPH can be used as a reductant. The catalytic ratio (NADPH/NADH) is 0.6 in the assay method. Neither oxygen nor cytochrome C can be utilized as a hydrogen acceptor.