Diaphorase from Clostridium sp.

Product Code: 172619

EC no: 1.6.99

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: 2.0×10-5 M (NADH), 6.0×10-6 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.