

Diaphorase (EC 1.8.1.4), *Escherichia coli*

Catalogue number	Presentation
AE00231	1000 U (5.8 mL)

Description

Diaphorase or dihydrolipoyl dehydrogenase (EC 1.8.1.4) is a flavoprotein enzyme capable of oxidizing the reduced form of NAD (NADH). This lipoamide dehydrogenase is a component of the glycine cleavage system, as well as of the alpha-ketoacid dehydrogenase complexes. It binds one FAD per protein subunit. The enzyme is provided in 3.2 M ammonium sulphate. For assay, this enzyme should be diluted in 0.5 mM FAD containing 0.5 mg/mL BSA.

Purity

Diaphorase has been determined to be >95% pure, according to SDS polyacrylamide gel electrophoresis (PAGE) followed by Coomassie Blue staining (Figure 1).

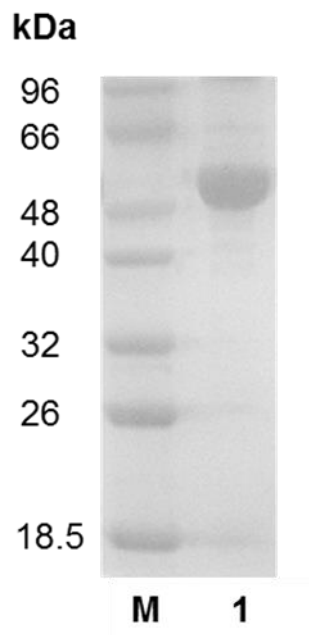


Figure 1. SDS-PAGE analysis of *E. coli* diaphorase. Electrophoresis was performed using a 12% polyacrylamide gel. Lane M, molecular weight marker; Lane 1, purified diaphorase (51 kDa).

Storage temperature

Diaphorase should be stored at 2°C to 8°C.

Temperature and pH optimum

Activity

174 U/ml

Unit Definition

One Unit of diaphorase was defined as the amount enzyme required to produce 1 μmole of NAD^+ from NADH , at 25 °C and pH 9.0.

For life science research only. Not for use in diagnostic procedures.