

Product information

gldA, 1-367aa

E. coli, His-tagged, Recombinant, *E. coli*

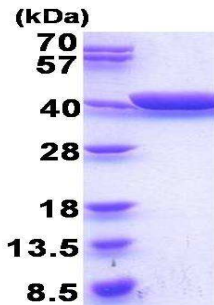
Cat. No. IBATGP2824

Full name: Glycerol dehydrogenase

NCBI Accession No.: NP_418380

Synonyms: ECK3937, JW5556

Description: gldA catalyzes the NAD-dependent oxidation of glycerol to dihydroxyacetone (glycerone). This protein allows microorganisms to utilize glycerol as a source of carbon under anaerobic conditions. In *E. coli*, an important role of GldA is also likely to regulate the intracellular level of dihydroxyacetone by catalyzing the reverse reaction, i.e. the conversion of dihydroxyacetone into glycerol. gldA possesses a broad substrate specificity, since it is also able to oxidize 1,2-propanediol and to reduce glycolaldehyde, methylglyoxal and hydroxyacetone into ethylene glycol, lactaldehyde and 1,2-propanediol, respectively. Recombinant *E. coli* gldA protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

<p>Form: Liquid. In Phosphate buffered saline (pH7.4), 10% glycerol</p> <p>Molecular Weight: 41.1 kDa (390aa) confirmed by MALDI-TOF</p> <p>Purity: > 95% by SDS - PAGE</p> <p>Concentration: 1 mg/ml (determined by Bradford assay)</p>	 <p>(kDa) 70 57 40 28 18 13.5 8.5</p>
<p>15% SDS-PAGE (3ug)</p>	
<p>Sequences of amino acids:</p> <pre> MGSSHHHHH SSGLVPRGSH MGSMDRI IQS PGKYIQGADV INRLGEYLKP LAERWL VVG D K FVLGFAQST VEKSFKDAGL VVEIAPFGGE CSQNEIDRLR GIAETAQCGA ILGIGGGKTL DTAKALAHFM GVPVAIAPT I ASTDAPCSAL SVIYTDEGEF DRYLLLPNNP NMVIVDTKIV AGAPARLLAA GIGDALATWF EARACSRSGA TTMAGGKCTQ AALALAE L CY NTLLEEGEKA MLAAEQHVVT PALERVIEAN TYLSGVGFES GGLAAAHAVH NGLTAIPDAH HYYHGEK VAF GTLTQLVLEN APVEE IETVA ALSHAVGLPI TLAQLDIKED VPAKMRIVAE AACAEGETIH NMPGGATPDQ VYAALLVADQ YGQRFLQEW E </pre>	

General references:

Subedi K.P., *et al.* (2008) *FEMS Microbiol. Lett.* 279:180-187

Gonzalez R., *et al.* (2008) *Metab. Eng.* 10:234-245

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

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Product information

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.
Avoid repeated freezing and thawing cycles.

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