

DLD active protein

DLD, 36-509aa, Human, His tag, E Coli (Bioactivity Validated)

CATALOG # AAA48623	HOST E Coli	APPLICATIONS SDS-Page
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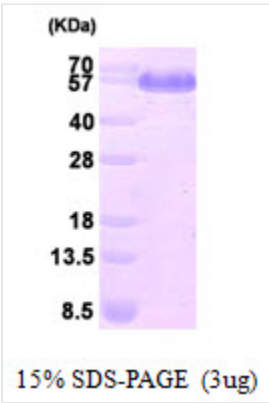
PRODUCT SYNONYMS

DLD; 36-509aa; Human; His tag; E Coli (Bioactivity Validated); Dihydrolipoyl dehydrogenase mitochondrial; DLDH; E3; GCSL; LAD; PHE3; Dihydrolipoyl dehydrogenase; mitochondrial Diaphorase; Dihydrolipoamide dehydrogenase; E3 component of pyruvate dehydrogenase; E3 component of pyruvate dehydrogenase complex 2 oxo glutarate complex branched chain keto acid dehydrogenase complex; Glycine cleavage system L protein; Glycine cleavage system protein L; Lipoamide reductase; Lipoyl dehydrogenase; PHE 3; ; DLD active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 95% by SDS-PAGE
Form/Format	Liquid. In 20 mM Tris-HCl Buffer (pH 8.0) containing 1mM DTT, 0.1M NaCl, 10% glycerol
Concentration	1 mg/ml (determined by Bradford assay) (varies by lot)
Sequence	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMADQ PIDADTVIG SGPGGYVAAI KAAQLGFKTV CIEKNETLGG TCLNVGCIPS KALLNNSHYH HMAHGKDFAS RGIEMSEVRL NLDKMMEQKS TAVKALTGGI AHLFKQNKVV HVNGYGKITG KNQVTATKAD GGTQVIDTKN ILIATGSEVT PFPGITIDED TIVSSTGALS LKKVPEKMVV IGAGVIGVEL GSVWQRLGAD VTAVEFLGHV GGVGIDMEIS KNFQRILQKQ GFKFKLNTKV TGATKKS DGK IDVSIEAASG GKAEVITCDV LLVCIGRRPF TKNLGLEELG IELDPRGRIP VNTRFQTKIP NIYAIGDVVA GPMLAHKAED EGIICVEGMA GGAVHIDYNC VPSVIYTHPE VAWVGKSEEQ LKEEGIEYKV GKFPFAANSR AKTNADTDGM VKILGQKSTD RVLGAHILGP GAGEMVNEAA LALEYGASCE DIARVCH AHP TLSEAFREAN LAASFGKSIN F
Sequence Length	509
Applicable Applications for DLD active protein	SDS-PAGE
Antigen Species	Human
Tag Information	His-tag
Biological Activity	Specific activity is > 200 units/mg, one unit will reduce 1.0 umole of DL-lipoamide to DL-dihydrolipoamide per minute at pH 6.5 at 25C.
Preparation and Storage	Can be stored at 4 degree C short term (1-2 weeks). For long term storage, aliquot and store at -20 degree C or -70 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for DLD active protein	DLD (Dihydrolipoamide dehydrogenase), also known as GCSL (glycine cleavage system L protein), is a component of the glycine cleavage system as well as of the alpha ketoacid dehydrogenase complexes. DLD is a flavin-dependent oxidoreductase and functions as a component of the alpha-keto acid dehydrogenase, the pyruvate dehydrogenase, the alpha-ketoglutarate dehydrogenase, the branched-chain alpha-keto acid dehydrogenase and as the L protein in the mitochondrial glycine cleavage system. Mutations in DLD protein can result in MSuD (maple syrup urine disease) and congenital infantile lactic acidosis. Recombinant human DLD protein, fused to His-tag at N-terminus, was expressed in E Coli and purified by using conventional chromatography techniques.
Product Categories/Family for DLD active protein	Metabolism
References	Giannopoulou E., et al. (2009) Anticancer Res. 29 (12):5077-82. ; Daee DL., et al. (2009) Proc Natl Acad Sci u S A. 107 (1):157-62.;

NCBI AND UNIPROT INFORMATION

NCBI GI #	91199540
NCBI GeneID	1738
NCBI Accession #	NP_000099
NCBI GenBank Nucleotide #	NM_000108.4
UniProt Accession #	P09622; Q14131; Q14167; Q59EV8; Q8WTS4; B2R5X0; B4DHG0; B4DT69
Molecular Weight	54.4 kDa (511aa)
NCBI Official Full Name	dihydrolipoyl dehydrogenase, mitochondrial isoform 1
NCBI Official Synonym Full Names	dihydrolipoamide dehydrogenase
NCBI Official Symbol	DLD
NCBI Official Synonym Symbols	E3; LAD; DLDD; DLDH; GCSL; PHE3
NCBI Protein Information	dihydrolipoyl dehydrogenase, mitochondrial
UniProt Protein Name	Dihydrolipoyl dehydrogenase, mitochondrial
UniProt Gene Name	DLD
UniProt Synonym Gene Names	GCSL; LAD; PHE3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/dld/48623>