

Recombinant Human Dihydrolipoamide Dehydrogenase, His-tagged

Cat. No. DLD-2036H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human dihydrolipoamide dehydrogenase protein, fused to His-tag at N-terminus, was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques. MW=54.4 kDa (511aa).
Species	Human
Source	<i>E.coli</i>
Description	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 α -keto acid dehydrogenase, the pyruvate dehydrogenase, the α -ketoglutarate dehydrogenase, the branched-chain α -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.
Sequences Of Amino Acids	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMADQ PIDADVTVIG SGPGGYVA AI KAAQLGFKTV CIEKNETLGG TCLNVGCIPS KALLNNSHYY HMAHGKDFAS RGIEMSEVRL NLDKMMEQKS TAVKALTGGI AHLFKQNKVV HVNGYGKITG KNQVTATKAD GGTQVIDTKN ILIATGSEVT PFPGITDED TIVSSTGALS LKKVPEKMOV IGAGVIGVEL GSVWQRLGAD VTAVEFLGHV GGVGIDMEIS KNFQRILQKQ GFKFKLNTKV TGATKKSDGK IDVSIEAASG

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

GKAEVITCDV LLVCIGRRPF TKNLGLEELG IELDPRGRIP VNTRFQTKIP
 NIYAIGDVVA GPMLAHKAED EGIICVEGMA GGAVHIDYNC VPSVIYTHPE
 VAWVGKSEEQ LKEEGIEYKV GKFPFAANSR AKTNADTDGM VKILGQKSTD
 RVLGAHILGP GAGEMVNEAA LALEYGASCE DIARVCHAHF TLSEAFREAN
 LAASFGKSIN F.

Purity > 95% by SDS-PAGE.

Concentration 1 mg/ml (determined by Bradford assay).

Form Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 0.1M NaCl, 10% glycerol.

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.

GENE INFORMATION

Gene Name [DLD dihydrolipoamide dehydrogenase \[Homo sapiens \]](#)

Synonyms DLD; dihydrolipoamide dehydrogenase; E3; LAD; DLDH; GCSL; PHE3; DLDCitrate; dihydrolipoyl dehydrogenase, mitochondrial; diaphorase; lipoamide reductase; lipoyl dehydrogenase; lipoamide dehydrogenase; glycine cleavage system L protein; glycine cleavage system protein L; E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex; EC 1.8.1.4; Dihydrolipoamide dehydrogenase; Glycine cleavage system L protein; Dihydrolipoyl dehydrogenase, mitochondrial; OTTHUMP00000206749; dihydrolipoamide dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex

Gene ID [1738](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_000108
Protein Refseq	NP_000099
MIM	238331
UniProt ID	P09622
Chromosome Location	7q31-q32
Pathway	cycle (TCA cycle); Glycine, serine and threonine metabolism; Glycolysis / Gluconeogenesis; Metabolic pathways; Pyruvate metabolism; Valine, leucine and isoleucine degradation; Diabetes pathways; Integration of energy metabolism; Metabolism of amino acids and derivatives; Pyruvate metabolism and Citric Acid (TCA) cycle
Function	FAD binding; NAD or NADH binding; dihydrolipoyl dehydrogenase activity; electron carrier activity; lipoamide binding; oxidoreductase activity