

DLD, human recombinant

CATALOG #: 7829-100 100 µg

ALTERNATE NAMES: Dihydrolipoyl dehydrogenase, mitochondrial, DLDH, E3, GCSL, LAD, PHE3

SOURCE: E. Coli

PURITY: > 95% by SDS - PAGE

MOL. WEIGHT: 54.4 kDa (511 aa, 36-509 aa + His Tag)

FORM: Liquid

FORMULATION: 1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1 mM DTT and 0.1 M NaCl

STORAGE CONDITIONS: 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.

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 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.

AMINO ACID SEQUENCE: MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD
 KDRWGSMDAQ PIDADVTVIG SGPGGYVA AI KAAQLGFKTV CIEKNETLGG TCLNVGCIPS
 KALLNNSHYY HMAHGKDFAS RGIEMSEVRL NLDKMMEQKS TAVKALTGGI
 AHLFKQNKVV HVNGYGKITG KNQVTATKAD GGTQVIDTKN ILIATGSEVT PFPGITIDED
 TIVSSTGALS LKKVPEKMVV IGAGVIGVEL GSVWQRLGAD VTAVEFLGHV GGVDIMEIS
 KNFQRILQKQ GFKFKLNTKV TGATKSDGK IDVSIEAASG GKAEVITCDV LLVCIGRRPF
 TKNLGLEELG IELDPRGRIP VNTRFQTKIP NIYAIGDVVA GPMLAHKAED EGIICVEGMA
 GGAVHIDYNC VPSVIYTHPE VAWVGKSEEQ LKEEGIEYKV GKFPFAANSR AKTNADTDGM

VKILGQKSTD RVLGAHILGP GAGEMVNEAA LALEYGASCE DIARVCHAHP TLSEAFREAN
 LAASFGKSIN F

BIOLOGICAL ACTIVITY: Specific activity: > 50 units/ml. One unit will reduce 1.0 µmole of DL-dihydrolipoamide per minute at pH 7.4 at 25°C.



15% SDS-PAGE (3µg)

Human Recombinant DLD

RELATED PRODUCTS:

- Proteins and Enzymes

FOR RESEARCH USE ONLY! Not to be used in humans.

