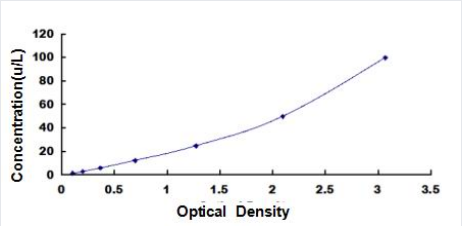
Dihydrolipoyl Dehydrogenase (DLD) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Dihydrolipoyl Dehydrogenase (DLD), ELISA Kit
Full Product Name	Human Dihydrolipoyl Dehydrogenase (DLD) ELISA Kit
Product Gene Name	DLD elisa kit
Product Synonym Names	LDH-D; DLD; Probable D-lactate dehydrogenase, mitochondrial
Species Reactivity	Human
Assay Type	Sandwich
Samples	Serum, Plasma, Tissue Homogenates, Cell Lysates, Cell Culture Supernates or Other Biological Fluids.
Detection Range	1.56-100U/L
Sensitivity	1.3U/L
Preparation and Storage	For unopened kits: All the reagents should be kept at 4 degree C upon receipt. For opened kits: Once the kit is opened, the remaining reagents still need to be stored according to the above storage conditions. In addition, return the unused wells to the foil pouch containing the desiccant pack and reseal along entire edge of zip-seal.
Molecular Weight	49,283 Da
OMIM	238331
3D Structure	ModBase 3D Structure for P09622
RTU ELISA Kit's Advantage	The Ready-To-Use (RTU) Kits require fewer steps in setup and take less time to run. Detection Solutions are pre-diluted and total incubation time is shorter than many other ELISA Kits.
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for DLD elisa kit	Test Principle: The microtiter plate provided in this kit has been pre-coated with an antibody specific to DLD. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to DLD. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain DLD, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of DLD in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of DLD elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for DLD purchase	MBS458868 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Dihydrolipoyl Dehydrogenase (DLD) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing DLD. The ELISA analytical biochemical technique of the MBS458868 kit is based on DLD antibody-DLD antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect DLD antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, DLD. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of DLD elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DLD. It may not necessarily be applicable to this product.

NCBI GI #	91199540
NCBI GeneID	1738
NCBI Accession #	NP_000099.2
UniProt Primary Accession #	P09622
UniProt Secondary Accession #	Q14131; Q14167; Q59EV8; Q8WTS4; B2R5X0; B4DHG0; B4DT69
UniProt Related Accession #	P09622
GenBank Nucleotide #	NM_000108.4
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
UniProt Protein Name	Dihydrolipoyl dehydrogenase, mitochondrial
UniProt Synonym Protein Names	Dihydrolipoamide dehydrogenase; Glycine cleavage system L protein
Protein Family	D-lactate dehydrogenase
UniProt Gene Name	DLD
UniProt Synonym Gene Names	GCSL; LAD; PHE3
NCBI Protein Information	dihydrolipoyl dehydrogenase, mitochondrial
NCBI Summary for DLD	This gene encodes a member of the class-I pyridine nucleotide-disulfide oxidoreductase family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. In homodimeric form, the encoded protein functions as a dehydrogenase and is found in several multi-enzyme complexes that regulate energy metabolism. However, as a monomer, this protein can function as a protease. Mutations in this gene have been identified in patients with E3-deficient maple syrup urine disease and lipoamide dehydrogenase deficiency. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
UniProt Comments for DLD	Lipoamide dehydrogenase is a component of the glycine cleavage system as well as an E3 component of three alpha-ketoacid dehydrogenase complexes (pyruvate-, alpha-ketoglutarate-, and branched-chain amino acid-dehydrogenase complex) (PubMed:15712224, PubMed:16442803, PubMed:16770810, PubMed:17404228, PubMed:20160912, PubMed:20385101). The 2-oxoglutarate dehydrogenase complex is mainly active in the mitochondrion (PubMed:29211711). A fraction of the 2-oxoglutarate dehydrogenase complex also localizes in the nucleus and is required for lysine succinylation of histones: associates with KAT2A on chromatin and provides succinyl-CoA to histone succinyltransferase KAT2A (PubMed:29211711). In monomeric form may have additional moonlighting function as serine protease (PubMed:17404228). Involved in the hyperactivation of spermatazoa during capacitation and in the spermatazoal acrosome reaction ().
Research Articles on DLD	**1.** Molecular characterization of dihydrolipoamide dehydrogenase binding sites to titanium dioxide has been reported.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/human-elisa-kits/dihydrolipoyl-dehydrogenase-dld/458868