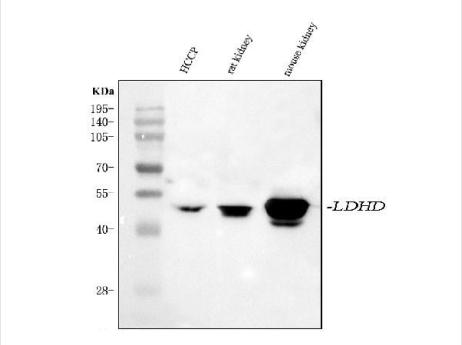
LDHD Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

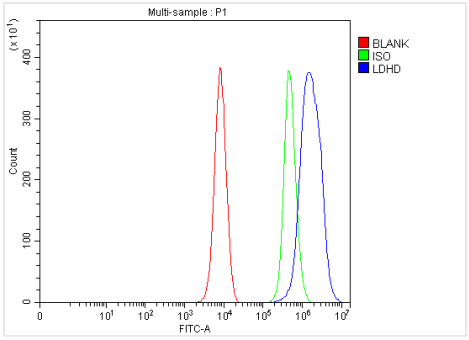
Product Name	LDHD, Polyclonal Antibody
Full Product Name	Anti-LDHD Antibody Picoband
Product Gene Name	anti-LDHD antibody
Product Synonym Names	Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody, KS6B1_HUMAN antibody, p70 alpha antibody, P70 beta 1 antibody, p70 ribosomal S6 kinase alpha antibody, p70 ribosomal S6 kinase beta 1 antibody, p70 S6 kinase alpha antibody, P70 S6 Kinase antibody, p70 S6 kinase alpha 1 antibody, p70 S6 kinase alpha 2 antibody, p70 S6K antibody, p70 S6K-alpha antibody, p70 S6KA antibody, p70(S6K) alpha antibody, p70(S6K)-alpha antibody, p70-alpha antibody, p70-S6K 1 antibody, p70-S6K antibody, P70S6K antibody, P70S6K1 antibody, p70S6Kb antibody, PS6K antibody, Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody, Ribosomal protein S6 kinase beta 1 antibody, Ribosomal protein S6 kinase beta-1 antibody, Ribosomal protein S6 kinase I antibody, RPS6KB1 antibody, S6K antibody, S6K-beta-1 antibody, S6K1 antibody, Serine/threonine kinase 14 alpha antibody, Serine/threonine-protein kinase 14A antibody, STK14A antibody
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	Expressed in all tissues.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.
Molecular Weight	52,144 Da
OMIM	AY092767 mRNA
3D Structure	ModBase 3D Structure for Q86WU2
Immunogen	E coli-derived human LDHD recombinant protein (Position: R56-Q498).
Subcellular Localization	Cytoplasm, Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross reactivity with other proteins.
Protein Function	Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway.
Product Categories/Family for anti-LDHD antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-LDHD antibody	Western Blot (WB), Flow Cytometry (FC/FACS), ELISA (EIA)

Application Notes for anti-LDHD antibody	WB: 0.25-0.5ug/ml, Human, Mouse, Rat FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml
Related Product Information for anti-LDHD antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product References and Citations for anti-LDHD antibody	1. Drabkin, M., Yogev, Y., Zeller, L., Zarivach, R., Zalk, R., Halperin, D., Wormser, O., Gurevich, E., Landau, D., Kadir, R., Perez, Y., Birk, O. S. Hyperuricemia and gout caused by missense mutation in D-lactate dehydrogenase. J. Clin. Invest. 129: 5163-5168, 2019. 2. Flick, M. J., Konieczny, S. F. Identification of putative mammalian D-lactate dehydrogenase enzymes. Biochem. Biophys. Res. Commun. 295: 910-916, 2002. 3. Monroe, G. R., van Eerde, A. M., Tessadori, F., Duran, K. J., Savelberg, S. M. C., van Alfen, J. C., Terhal, P. A., van der Crabben, S. N., Lichtenbelt, K. D., Fuchs, S. A., Gerrits, J., van Roosmalen, M. J., and 16 others. Identification of human D lactate dehydrogenase deficiency. Nature Commun. 10: 1477, 2019. Note: Electronic Article.
Other Notes	Small volumes of anti-LDHD antibody 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 LDHD purchase	MBS1759187 is an antibody targeting LDHD. Also known as Anti-LDHD Antibody Picoband. Reactive in Human, Mouse, Rat. Host: Rabbit.



Western Blot (WB) of anti-LDHD antibody

Figure 1. Western blot analysis of LDHD using anti-LDHD antibody (MBS1759187).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human hepatocellular carcinoma paracancerous tissue (HCCP) lysates,Lane 2: rat kidney tissue lysates,Lane 3: mouse kidney tissue lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LDHD antigen affinity purified polyclonal antibody (#MBS1759187) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (#MBS176460) with Tanon 5200 system. A specific band was detected for LDHD at approximately 45-50 kDa. The expected band size for LDHD is at 55 kDa.



Flow Cytometry (FC/FACS) of anti-LDHD antibody

Figure 2. Flow Cytometry analysis of K562 cells using anti-LDHD antibody (MBS1759187).Overlay histogram showing K562 cells stained with MBS1759187 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-LDHD Antibody (MBS1759187, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (MBS177405, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL DETAILS

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

NCBI GI #	37595754
NCBI GeneID	197257
NCBI Accession #	NP_705690.2
UniProt Primary Accession #	Q86WU2
UniProt Secondary Accession #	Q8IZK5
UniProt Related Accession #	Q86WU2

GenBank Nucleotide #	NM_153486.3
NCBI Official Full Name	probable D-lactate dehydrogenase, mitochondrial isoform 1
NCBI Official Synonym Full Names	lactate dehydrogenase D
NCBI Official Symbol	LDHD
NCBI Official Synonym Symbols	DLD
UniProt Protein Name	Probable D-lactate dehydrogenase, mitochondrial
Protein Family	Probable D-lactate dehydrogenase
UniProt Gene Name	LDHD
UniProt Synonym Gene Names	DLD; Lactate dehydrogenase D
NCBI Protein Information	probable D-lactate dehydrogenase, mitochondrial
NCBI Summary for LDHD	The protein encoded by this gene belongs to the D-isomer specific 2-hydroxyacid dehydrogenase family. The similar protein in yeast has both D-lactate and D-glycerate dehydrogenase activities. Alternative splicing occurs at this locus and two transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Jul 2008]
Research Articles on LDHD	**1.** The activity and expression of the mitochondrial D-lactate dehydrogenase, is higher in prostate cancer versus normal prostate cells.
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/polyclonal-human-mouse-rat-antibody/ldhd/1759187