

# Recombinant mouse Lactate Dehydrogenase B/LDHB protein

Catalog Number: ATGP3643

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-334aa

### UniProt No.

P16125

### NCBI Accession No.

NP\_032518

### Alternative Names

L-lactate dehydrogenase B chain isoform Ldhb, A1790582, H-Ldh, Ldh-2, LDH-B, LDH-H, Ldh2, LDH heart subunit

## PRODUCT SPECIFICATION

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### Molecular Weight

39 kDa (357aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Specific activity is > 150unit/mg, in which one unit will convert 1.0 umole of pyruvate to L-lactate and beta-NAD per minute at pH 7.5.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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# Recombinant mouse Lactate Dehydrogenase B/LDHB protein

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## Description

Ldhb, also known as L-lactate dehydrogenase B chain isoform Ldhb, is a member of the lactate dehydrogenase family. It is an oxidoreductase which catalyses the interconversion of pyruvate and lactate with concomitant interconversion of NADH and NAD<sup>+</sup>. As this protein can also catalyze the oxidation of hydroxybutyrate, it is occasionally called Hydroxybutyrate Dehydrogenase (HBD). The LDH family consists of three members, LDH-A, LDH-B and LDH-C. LDHs function as powerful markers for germ cell tumors. Recombinant mouse Ldhb protein, fused to His-tagging at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MGSMATLKEK LIASVADDEA AVPNNKITVV GVGQVGMACA ISILGKSLAD ELALVDVLED  
KLKGEMMDLQ HGSLFLQTPK IVADKDYSVT ANSKIVVTA GVRQQEGESR LNLVQRNVNV FKFIIPQIVK YSPDCTIIVV  
SNPVDILTYV TWKLSGLPKH RVIGSGCNLD SARFRYLMAE KLGHPSSCH GWILGEHGDS SVAVWSGVNV AGVSLQELNP  
EMGTDNDSN WKEVHKMVVD SAYEVIKLGK YTNWAIGLSV ADLIESMLKN LSRIHPVSTM VKGMYGIENE VFSLPCILN  
ARGLTSVINQ KDKDDEVAQL RKSADTLWDI QDKLDL

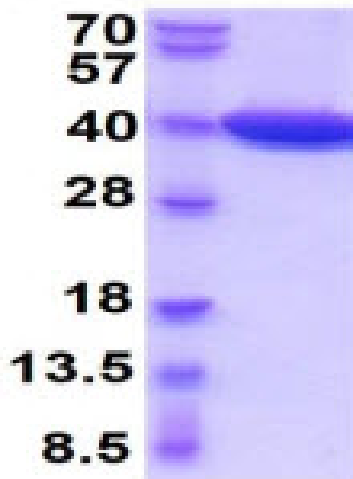
## General References

Read JA., et al. (2001) Proteins. 43(2):175-85.  
Butt AA., et al. (2002) AIDS Read. 12(7):317-21

## DATA

### SDS-PAGE

(kDa)



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)