

## LDHD Polyclonal antibody

Catalog Number: 14398-1-AP

2 Publications

## Basic Information

## Catalog Number:

14398-1-AP

## Size:

350 µg/ml

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG5897

## GenBank Accession Number:

BC047902

## GeneID (NCBI):

197257

## UNIPROT ID:

Q86WU2

## Full Name:

lactate dehydrogenase D

## Calculated MW:

52 kDa

## Observed MW:

45-54 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

WB 1:1000-1:4000

IHC 1:50-1:500

IF/ICC 1:20-1:200

## Applications

## Tested Applications:

WB, IHC, IF/ICC, ELISA

## Cited Applications:

WB, IHC, IP, IF

## Species Specificity:

human, mouse, rat

## Cited Species:

human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Positive Controls:

WB : mouse liver tissue, HepG2 cells, rat liver tissue

IHC : human liver cancer tissue, human osteosarcoma tissue

IF/ICC : HepG2 cells,

## Background Information

Two naturally occurring forms of lactate dehydrogenase with similar but unique substrate specificities have been isolated in lower organisms including invertebrates, fungi, and prokaryotes. These dehydrogenase enzymes are L-lactate dehydrogenase and D-lactate dehydrogenase (LDHD) that are specific to the L and D isomers of lactate, respectively (PMID: 12127981). In lactic acid bacteria, LDHD plays a key role in anaerobic energy metabolism (PMID: 497162). Despite the identification of D-lactate and other D-2-hydroxyacids in prokaryotes, and the obvious connections and similarities to vertebrate metabolic pathways, very few mammalian D-2-hydroxyacid dehydrogenases have been found. LDHD has 2 isoforms with the molecular weight of 52 and 54 kDa, and can be detected as 45-54 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Mengzhu Lv	37582812	Signal Transduct Target Ther	IHC, IP
Yu Zhang	37587457	BMC Cancer	IHC, WB, IF

## Storage

## Storage:

Store at -20°C. Stable for one year after shipment.

## Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

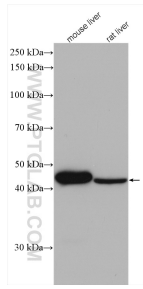
For technical support and original validation data for this product please contact:

T: 4006900926

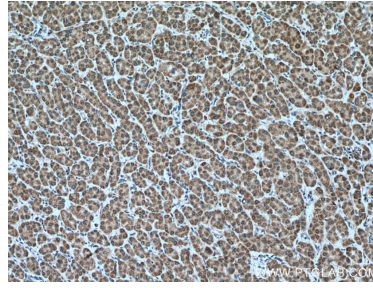
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

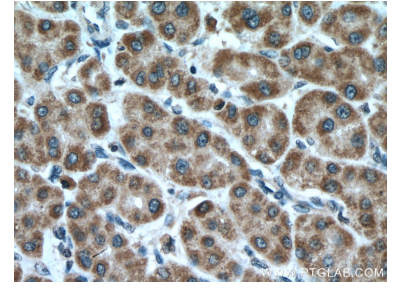
## Selected Validation Data



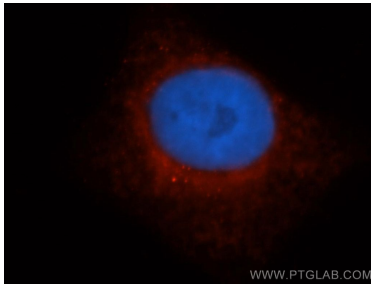
Various lysates were subjected to SDS PAGE followed by western blot with 14398-1-AP (LDHD antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14398-1-AP (LDHD antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14398-1-AP (LDHD antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HepG2 cells, using LDHD antibody 14398-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).