

For Research Use Only

LDHD Polyclonal antibody

Catalog Number: 14398-1-AP **2 Publications**



Basic Information

Catalog Number: 14398-1-AP	GenBank Accession Number: BC047902	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 350 µg/ml by Nanodrop and 280 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 197257	Recommended Dilutions: WB 1:1000-1:4000 IHC 1:50-1:500 IF 1:20-1:200
Source: Rabbit	Full Name: lactate dehydrogenase D	
Isotype: IgG	Calculated MW: 52 kDa	
Immunogen Catalog Number: AG5897	Observed MW: 45-54 kDa	

Applications

Tested Applications:

IF, IHC, WB, ELISA

Cited Applications:

IF, IHC, IP, WB

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 : 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 54kDa, 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

*** 20ul sizes contain 0.1% BSA

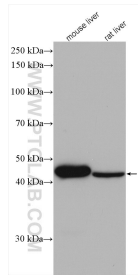
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

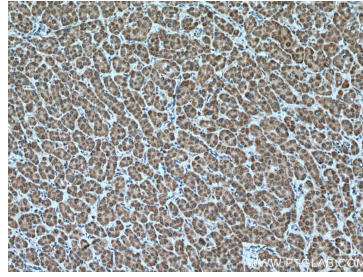
E: proteintech@ptglab.com
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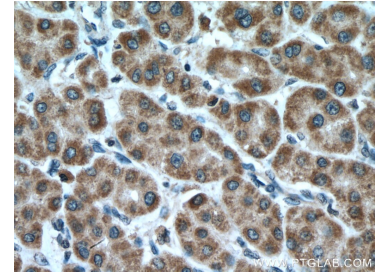
Selected Validation Data



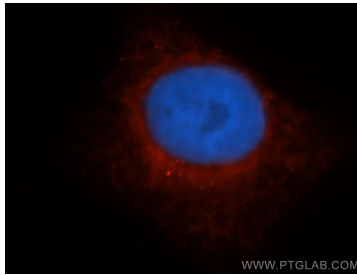
Various lysates were subjected to SDS PAGE followed by western blot with 14398-1-AP (LDHD antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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).