

For Research Use Only

LIAS Polyclonal antibody

Catalog Number: 11577-1-AP **24 Publications**



Basic Information

Catalog Number: 11577-1-AP	GenBank Accession Number: BC023635	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 800 µg/ml by Nanodrop;	GeneID (NCBI): 11019	Recommended Dilutions: WB 1:1000-1:5000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: O43766	
Isotype: IgG	Full Name: lipoic acid synthetase	
Immunogen Catalog Number: AG2162	Calculated MW: 372 aa, 42 kDa	
	Observed MW: 34-42 kDa	

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB, IHC

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

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 : L02 cells, HepG2 cells, human brain tissue, Raji cells, K-562 cells, mouse brain tissue, mouse liver tissue, rat liver tissue

IHC : human liver cancer tissue, human lymphoma tissue

Background Information

LIAS (lipoyl synthase, mitochondrial) is also named as LAS and belongs to the radical SAM superfamily and lipoyl synthase family. It produces alpha-lipoic acid, an antioxidant and an essential cofactor in alpha-ketoacid dehydrogenase complexes, which participate in glucose oxidation and ATP generation (PMID:22021711). The deduced 373-amino acid protein has a calculated molecular mass of about 42 kD. The N-terminal 26 amino acids encode a potential mitochondrial targeting presequence that, upon removal, would result in a deduced mature protein of 347 amino acids with a molecular mass of about 39 kD (PMID:11389890). Defects in LIAS are a cause of pyruvate dehydrogenase lipoic acid synthetase deficiency (PDHLD).

Notable Publications

Author	Pubmed ID	Journal	Application
César Vásquez-Trincado	34550363	Hum Mol Genet	WB
Ying Wang	34707288	Nature	WB
Jinke Huang	36389705	Front Immunol	IHC

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**

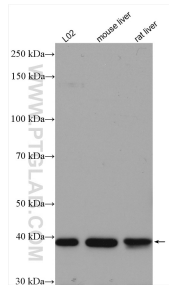
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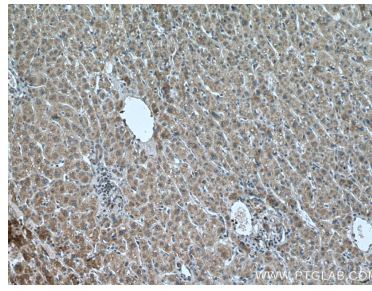
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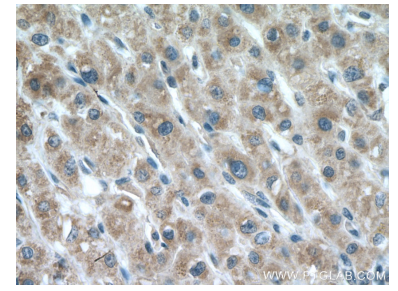
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 11577-1-AP (LIAS antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 11577-1-AP (LIAS 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 11577-1-AP (LIAS antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).