

For Research Use Only

# LIAS Polyclonal antibody

Catalog Number: 11577-1-AP

54 Publications



## Basic Information

Catalog Number:

11577-1-AP

Concentration:

800 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2162

GenBank Accession Number:

BC023635

GeneID (NCBI):

11019

UNIPROT ID:

O43766

Full Name:

lipoic acid synthetase

Calculated MW:

372 aa, 42 kDa

Observed MW:

34-42 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:5000

IHC 1:50-1:500

## Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

**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

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

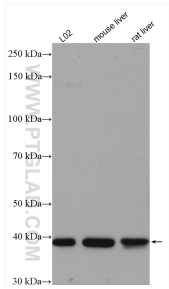
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

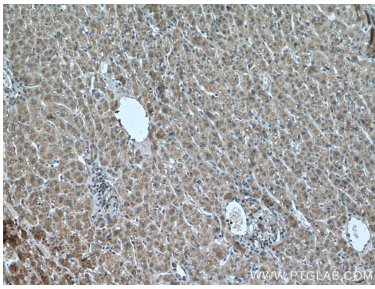
W: [ptgcn.com](http://ptgcn.com)

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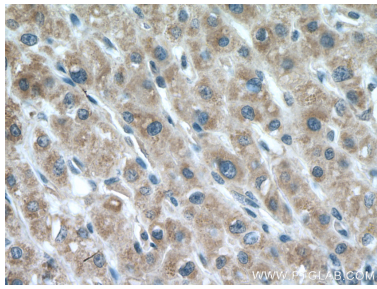
## Selected Validation Data



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).