### For Research Use Only

# LIAS Monoclonal antibody

Catalog Number: 67298-1-lg 1 Publications



**Basic Information** 

Catalog Number: 67298-1-lg

lgG1

BC023635 GeneID (NCBI): Size: 1700 ug/ml 11019 **UNIPROT ID:** Source: Mouse 043766 Full Name: Isotype:

Calculated MW: Immunogen Catalog Number: AG27286 372 aa, 42 kDa Observed MW:

34-42 kDa

lipoic acid synthetase

GenBank Accession Number:

**Purification Method:** 

Protein A purification CloneNo.:

3B5G7

Recommended Dilutions: WB 1:1000-1:6000 IHC 1:500-1:2000

**Applications** 

**Tested Applications:** WB, IHC, ELISA Cited Applications: WB

Species Specificity: human, mouse, rat, pig **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: LNCaP cells, pig brain tissue, HEK-293 cells, K-562 cells, rat brain tissue, mouse brain tissue

IHC: mouse brain 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
Shuai Yang	38956251	Sci Rep	WB

Storage

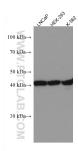
Storage:

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

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

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



LNCaP cells were subjected to SDS PAGE followed by western blot with 67298-1-1g (LIAS antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 67298-1-Ig (LIAS antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).