

LIAS Monoclonal antibody

Catalog Number: 67298-1-Ig 1 Publications

Basic Information

Catalog Number: 67298-1-Ig	GenBank Accession Number: BC023635	Purification Method: Protein A purification
Size: 150ul, Concentration: 1700 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 11019	CloneNo.: 3B5G7
Source: Mouse	UNIPROT ID: O43766	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:500-1:2000
Isotype: IgG1	Full Name: lipoic acid synthetase	
Immunogen Catalog Number: AG27286	Calculated MW: 372 aa, 42 kDa	
	Observed MW: 34-42 kDa	

Applications

Tested Applications: WB, IHC, ELISA	Positive Controls: WB : LNCaP cells, pig brain tissue, HEK-293 cells, K-562 cells, rat brain tissue, mouse brain tissue
Cited Applications: WB	IHC : mouse brain tissue,
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	

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

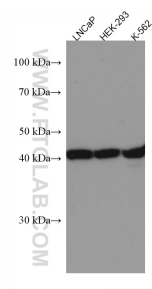
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
 Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

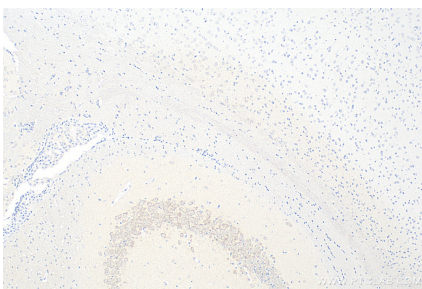
For technical support and original validation data for this product please contact:
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Selected Validation Data



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



Immunohistochemical analysis of paraffin-embedded 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).