| Basic Information | Catalog Number: | GenBank Accession Number: | Purification Method: <br> Protein G purification |
| :--- | :--- | :--- | :--- |
|  | $67298-1-\mathrm{lg}$ | BC023635 | CloneNo.: |
|  | Size: | GenelD (NCBI): | 11019 |
|  | $1700 \mu \mathrm{~g} / \mathrm{ml}$ | UNIPROT ID: | 3B5G7 |
|  | Source: | O43766 | Recommended Dilutions: |
|  | Mouse | Full Name: | WB 1:1000-1:6000 |
|  | Isotype: | lipoic acid synthetase |  |
|  | IgG1 | Calculated MW: |  |
|  | Immunogen Catalog Number: | 372 aa, 42 kDa |  |
|  | AG27286 | Observed MW: | $34-42 \mathrm{kDa}$ |

$\overline{\text { Applications }}$

Tested Applications: WB,ELISA
Species Specificity:
Human, Mouse, Rat, Pig

Positive Controls:
WB : LNCaP cells, pig brain tissue, HEK-293 cells, K-562 cells, rat brain tissue, mouse brain tissue

Background Information

Storage

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).

Storage:
Store at $-20^{\circ} \mathrm{C}$.
Storage Buffer:
PBS with $0.02 \%$ sodium azide and $50 \%$ glycerol pH 7.3.
Aliquoting is unnecessary for $-20^{\circ} \mathrm{C}$ storage

Selected Validation Data


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

