

LIPT1 Rabbit pAb

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Catalog # AP57026

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9Y234
Reactivity	Rat, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42479
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LIPT1
Epitope Specificity	101-200/373
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion.
SIMILARITY	Belongs to the lplA family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The process of transferring lipoic acid to proteins is a two-step process. The first step is the activation of lipoic acid by lipoate-activating enzyme to form lipoyl-AMP. For the second step, the protein encoded by this gene transfers the lipoyl moiety to apoproteins. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 13. Read-through transcription also exists between this gene and the neighboring downstream mitochondrial ribosomal protein L30 (MRPL30) gene. [provided by RefSeq, Mar 2011]

Additional Information

Gene ID	51601
Other Names	Lipoyl amidotransferase LIPT1, mitochondrial, 2.3.1.200, Lipoate biosynthesis protein, Lipoate-protein ligase, Lipoyl ligase, Lipoyltransferase 1, 2.3.1.-, LIPT1 (HGNC:29569)
Target/Specificity	Highly expressed in skeletal muscle and heart, moderately in kidney and pancreas, and detected at lower levels in liver, brain, placenta and lung.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	LIPT1 (HGNC:29569)
Function	Lipoyl amidotransferase that catalyzes the transfer of lipoyl moieties from lipoyl-protein H of the glycine cleavage system (lipoyl- GCSH) to E2 subunits of the pyruvate dehydrogenase complex (PDCE2) (PubMed: 29987032). Unable to catalyze the transfer of octanoyl from octanoyl-GCSH to PDCE2 (PubMed: 29987032). In vitro, it is also able to catalyze the transfer of the lipoyl group from lipoyl-AMP to the specific lysine residue of lipoyl domains of lipoate-dependent enzymes but this reaction may not be physiologically relevant (Probable).
Cellular Location	Mitochondrion {ECO:0000250 UniProtKB:O46419}.
Tissue Location	Highly expressed in skeletal muscle and heart, moderately in kidney and pancreas, and detected at lower levels in liver, brain, placenta and lung.

Background

The process of transferring lipoic acid to proteins is a two-step process. The first step is the activation of lipoic acid by lipoate-activating enzyme to form lipoyl-AMP. For the second step, the protein encoded by this gene transfers the lipoyl moiety to apoproteins. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 13. Read-through transcription also exists between this gene and the neighboring downstream mitochondrial ribosomal protein L30 (MRPL30) gene. [provided by RefSeq, Mar 2011]

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.