

Lipoamide Dehydrogenase Rabbit mAb

Catalog # AP78392

Product Information

Application WB, IHC-P, IF, ICC

Primary Accession P09622

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human DLDH

Purification Affinity Purified

Calculated MW 54177

Additional Information

Gene ID 1738

Other Names DLD

Dilution WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name DLD

Synonyms GCSL, LAD, PHE3

Function Lipoamide dehydrogenase is a component of the glycine cleavage system as

well as an E3 component of three alpha-ketoacid dehydrogenase complexes

(pyruvate-, alpha-ketoglutarate-, and branched- chain amino

acid-dehydrogenase complex) (PubMed: 15712224, PubMed: 16442803,

PubMed:<u>16770810</u>, PubMed:<u>17404228</u>, PubMed:<u>20160912</u>,

PubMed: 20385101). The 2-oxoglutarate dehydrogenase complex is mainly active in the mitochondrion (PubMed: 29211711). A fraction of the 2-oxoglutarate dehydrogenase complex also localizes in the nucleus and is required for lysine succinylation of histones: associates with KAT2A on chromatin and provides succinyl-CoA to histone succinyltransferase KAT2A (PubMed: 29211711). In monomeric form may have additional moonlighting

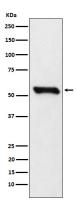
function as serine protease (PubMed: 17404228). Involved in the

hyperactivation of spermatazoa during capacitation and in the spermatazoal acrosome reaction (By similarity).

Cellular Location

Mitochondrion matrix. Nucleus. Cell projection, cilium, flagellum {ECO:0000250 | UniProtKB:Q811C4}. Cytoplasmic vesicle, secretory vesicle, acrosome. Note=Mainly localizes in the mitochondrion. A small fraction localizes to the nucleus, where the 2- oxoglutarate dehydrogenase complex is required for histone succinylation.

Images



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