

Lipoamide Dehydrogenase Rabbit mAb

Catalog # AP74870

Product Information

Application WB, IHC-P, IHC-F, ICC

Primary Accession P09622

Reactivity Human, Mouse, Rat

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 54177

Additional Information

Gene ID 1738

Other Names DLD

Dilution WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A ICC~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

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: 16770810, PubMed: 17404228, PubMed: 20160912,

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

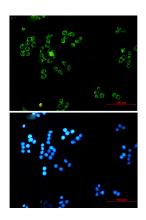
hyperactivation of spermatazoa during capacitation and in the spermatazoal

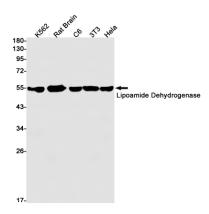
acrosome reaction (By similarity).

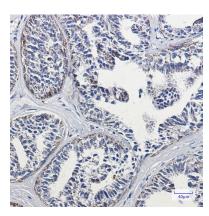
Cellular Location Mitochondrion matrix. Nucleus. Cell projection, cilium, flagellum

{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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