

DLDH Antibody

Rabbit mAb Catalog # AP92487

Product Information

Application Primary Accession Reactivity Clonality Other Names	WB, IHC, IF, ICC, IHF <u>P09622</u> Rat, Human, Mouse Monoclonal Diaphorase; Dihydrolipoamide dehydrogenase; DLDD; DLDH; GCSL; LAD; lipoamide dehydrogenase; Lipoamide reductase; Lipoyl dehydrogenase; PHE3;
lsotype Host	Rabbit IgG Rabbit
Calculated MW	54177

Additional Information

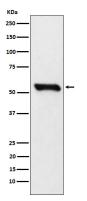
Dilution Purification	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 Affinity-chromatography A synthesized peptide derived from human DLDH
Immunogen Description	Lipoamide dehydrogenase is a component of the glycine cleavage system as
	well as of the alpha-ketoacid dehydrogenase complexes. Involved in the hyperactivation of spermatazoa during capacitation and in the spermatazoal acrosome reaction.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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: <u>17404228</u>). 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



Western blot analysis of DLDH expression in 293T cell lysate.

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