

**DLDH Antibody**  
**Rabbit mAb**  
**Catalog # AP92487**

**Specification**

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**DLDH Antibody - Product Information**

Application	<b>WB, IHC, ICC</b>
Primary Accession	<a href="#">P09622</a>
Reactivity	<b>Rat</b>
Clonality	<b>Monoclonal</b>

**Other Names**

Diaphorase; Dihydrolipoamide dehydrogenase; DLDD; DLDH; GCSL; LAD; lipoamide dehydrogenase; Lipoamide reductase; Lipoyl dehydrogenase; PHE3;

Isotype	<b>Rabbit IgG</b>
Host	<b>Rabbit</b>
Calculated MW	<b>54177 Da</b>

**DLDH Antibody - Additional Information**

Purification	<b>Affinity-chromatography</b>
Immunogen	<b>A synthesized peptide derived from human DLDH</b>
Description	<b>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.</b>
Storage Condition and Buffer	<b>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.</b>

**DLDH Antibody - 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:<a href="http://www.uniprot.org/citations/15712224" target="\_blank">15712224</a>, PubMed:<a href="http://www.uniprot.org/citations/16442803" target="\_blank">16442803</a>, PubMed:<a href="http://www.uniprot.org/citations/16770810" target="\_blank">16770810</a>, PubMed:<a href="http://www.uniprot.org/citations/17404228" target="\_blank">17404228</a>, PubMed:<a href="http://www.uniprot.org/citations/17404228" target="\_blank">17404228</a>)

<http://www.uniprot.org/citations/20160912> target="\_blank">20160912</a>, PubMed:<a href="http://www.uniprot.org/citations/20385101" target="\_blank">20385101</a>). The 2-oxoglutarate dehydrogenase complex is mainly active in the mitochondrion (PubMed:<a href="http://www.uniprot.org/citations/29211711" target="\_blank">29211711</a>). 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:<a href="http://www.uniprot.org/citations/29211711" target="\_blank">29211711</a>). In monomeric form may have additional moonlighting function as serine protease (PubMed:<a href="http://www.uniprot.org/citations/17404228" target="\_blank">17404228</a>). Involved in the hyperactivation of spermatazoa during capacitation and in the spermatazoal acrosome reaction (By similarity).

### Cellular Location

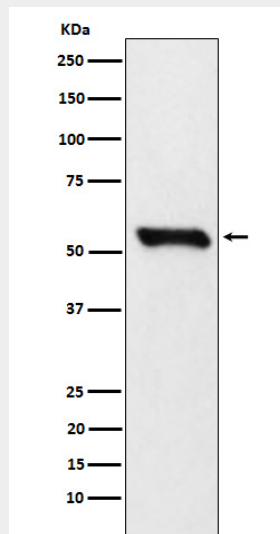
Mitochondrion matrix. Nucleus. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q811C4}. Cytoplasmic vesicle, secretory vesicle, acrosome. Note=Mainly localizes in the mitochondrion. A small fraction localizes to the nucleus, where the 2-oxoglutarate dehydrogenase complex is required for histone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

### DLDH Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### DLDH Antibody - Images



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