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DLD / Diaphorase / E3 Antibody (clone 1G11)

Mouse Monoclonal Antibody
Catalog # ALS14364

Specification

DLD / Diaphorase / E3 Antibody (clone 1G11) - Product Information

Application	**IHC**
Primary Accession	P09622
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**54kDa KDa**

DLD / Diaphorase / E3 Antibody (clone 1G11) - Additional Information

Gene ID 1738

Other Names
Dihydrolipoyl dehydrogenase, mitochondrial, 1.8.1.4, Dihydrolipoamide dehydrogenase, Glycine cleavage system L protein, DLD, GCSL, LAD, PHE3

Target/Specificity
Human DLD

Reconstitution & Storage
Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions
DLD / Diaphorase / E3 Antibody (clone 1G11) is for research use only and not for use in diagnostic or therapeutic procedures.

DLD / Diaphorase / E3 Antibody (clone 1G11) - 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:<a

href="http://www.uniprot.org/citations/29211711" target="_blank">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).

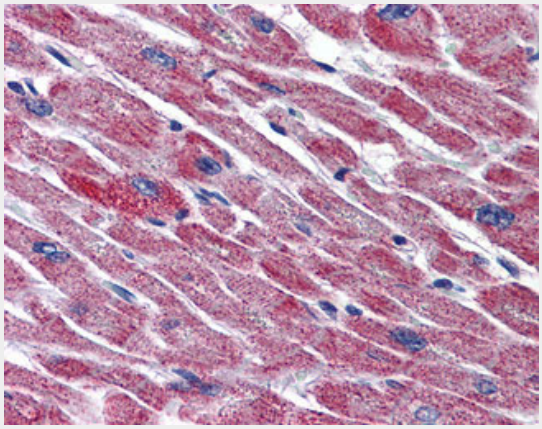
Cellular Location
Mitochondrion matrix. Nucleus. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q811C4}. Cytoplasmic vesicle, secretory vesicle, acrosome. Note=Mainly localizes in the mitochondrion. A small fraction localizes to the nucleus, where the 2-oxoglutarate dehydrogenase complex is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

DLD / Diaphorase / E3 Antibody (clone 1G11) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DLD / Diaphorase / E3 Antibody (clone 1G11) - Images



Anti-DLD / DLDH antibody IHC of human heart.

DLD / Diaphorase / E3 Antibody (clone 1G11) - Background

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.

DLD / Diaphorase / E3 Antibody (clone 1G11) - References

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Pons G.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:1422-1426(1988).
Feigenbaum A.S.,et al.Genomics 17:376-381(1993).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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