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KD-Validated Anti-Dihydrolipoamide dehydrogenase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1232

Specification

KD-Validated Anti-Dihydrolipoamide dehydrogenase Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	P09622
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 54 kDa , observed, 56 kDa KDa**
Gene Name	**DLD**
Aliases	**DLD; Dihydrolipoamide Dehydrogenase; OGDC-E3; DLDH; GCSL; LAD; E3; E3 Component Of Pyruvate Dehydrogenase Complex, 2-Oxo-Glutarate Complex, Branched Chain Keto Acid Dehydrogenase Complex; Dihydrolipoyl Dehydrogenase, Mitochondrial; Glycine Cleavage System L Protein; EC 1.8.1.4; PHE3; Dihydrolipoamide Dehydrogenase (E3 Component Of Pyruvate Dehydrogenase Complex, 2-Oxo-Glutarate Complex, Branched Chain Keto Acid Dehydrogenase Complex); Epididymis Secretory Sperm Binding Protein; Glycine Cleavage System Protein L; Lipoamide Dehydrogenase; Lipoyl Dehydrogenase; Lipoamide Reductase; Diaphorase; EC 1.8.1 48; DLDD**
Immunogen	**A synthesized peptide derived from human DLDH**

KD-Validated Anti-Dihydrolipoamide dehydrogenase Rabbit Monoclonal Antibody - 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

KD-Validated Anti-Dihydrolipoamide dehydrogenase Rabbit Monoclonal 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: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).

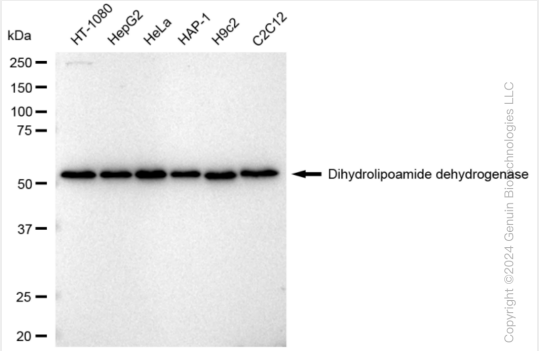
Cellular Location
Mitochondrion matrix. Nucleus. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q811C4}. Cytoplasmic vesicle, secretory vesicle, acrosome. Note=Mainly localizes in the mitochondrion. A small fraction localizes to the nucleus, where the 2-oxoglutarate dehydrogenase complex is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

KD-Validated Anti-Dihydrolipoamide dehydrogenase Rabbit Monoclonal 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 Cytomety
- Cell Culture

KD-Validated Anti-Dihydrolipoamide dehydrogenase Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Dihydrolipoamide dehydrogenase antibody (Cat#AGI1232).

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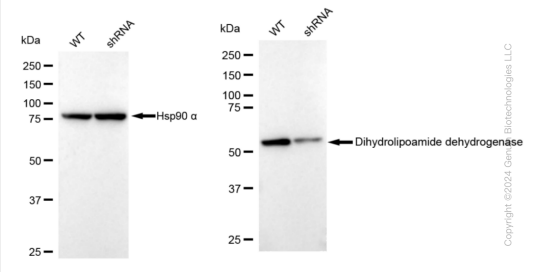
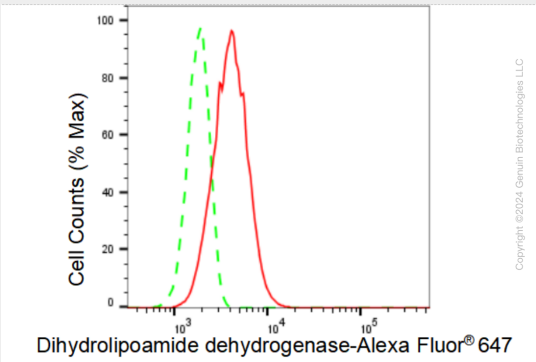
Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Dihydrolipoamide dehydrogenase antibody (Cat#AGI1232, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Dihydrolipoamide dehydrogenase antibody (Cat#AGI1232). Dihydrolipoamide dehydrogenase expression in wild type (WT) and Dihydrolipoamide dehydrogenase shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Dihydrolipoamide dehydrogenase antibody (Cat#AGI1232, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Dihydrolipoamide dehydrogenase expression in HT-1080 cells using Dihydrolipoamide dehydrogenase antibody (Cat#AGI1232, 1:2,000). Green, isotype control; red, Dihydrolipoamide dehydrogenase.