

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 A synthesized peptide derived from human DLDH
Immunogen	

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

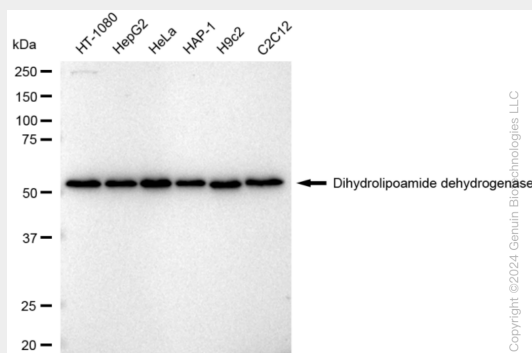
Mitochondrion matrix. Nucleus. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q811C4}. Cytoplasmic vesicle, secretory vesicle, acrosome. Note=Mainly localizes in the mitochondrion. A small fraction localizes to the nucleus, where the 2-oxoglutarate dehydrogenase complex is required for histone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

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

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

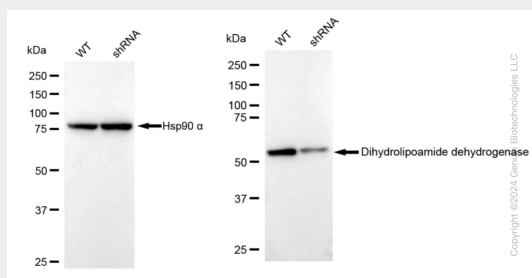
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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

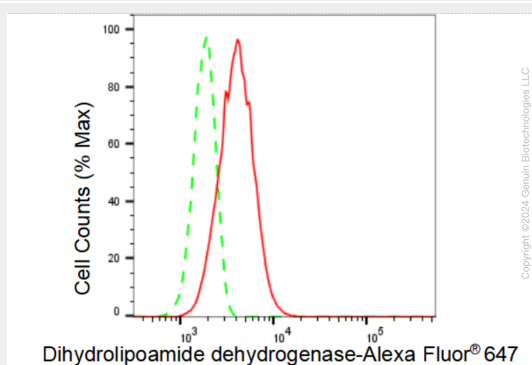


Western blotting analysis using anti-Dihydrolipoamide dehydrogenase antibody (Cat#AGI1232).

Total cell lysates (30 μ g) 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 μ g 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.