Product Name: KD-Validated Dihydrolipoamide Dehydrogenase Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01533
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 54.2kDa

Antigen Information

Gene Name	DLD
Alternative Names	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
Gene ID	1738.0

SwissProt ID	P09622
Immunogen	A synthesized peptide derived from human DLDH

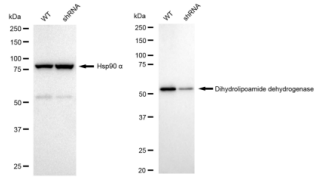
Background

This gene encodes a member of the class-I pyridine nucleotide-disulfide oxidoreductase family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. In homodimeric form, the encoded protein functions as a dehydrogenase and is found in several multi-enzyme complexes that regulate energy metabolism. However, as a monomer, this protein can function as a protease. Mutations in this gene have been identified in patients with E3-deficient maple syrup urine disease and lipoamide dehydrogenase deficiency. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

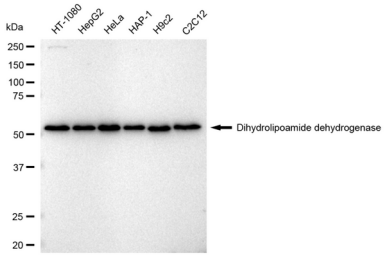
Research Area

Signal Transduction,Cancer,Metabolism

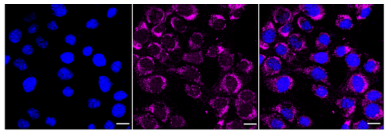
Image Data



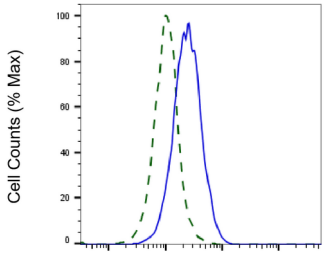
Western blotting analysis using Dihydrolipoamide dehydrogenase antibody (KVAb01533). Dihydrolipoamide dehydrogenase expression in wild type (WT) and Dihydrolipoamide dehydrogenase shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Dihydrolipoamide dehydrogenase antibody (KVAb01533, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



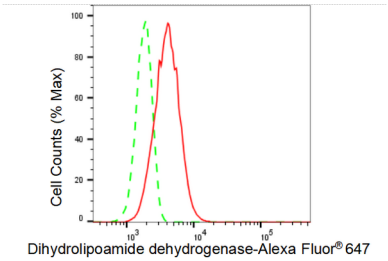
Western blotting analysis using Dihydrolipoamide dehydrogenase antibody (KVAb01533). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Dihydrolipoamide dehydrogenase antibody (KVAb01533, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with Dihydrolipoamide dehydrogenase antibody (KVAb01533, 1:1,000) . Nuclei were stained blue with DAPI; Dihydrolipoamide dehydrogenase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of Dihydrolipoamide dehydrogenase knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Dihydrolipoamide dehydrogenase antibody (KVAb01533, 1:2,000) and analyzed using CytoFLEX.



Flow cytometric analysis of Dihydrolipoamide dehydrogenase expression in HT-1080 cells using Dihydrolipoamide dehydrogenase antibody (KVAb01533, 1:2,000). Green, isotype control; red, Dihydrolipoamide dehydrogenase.