

# Anti-Lipoamide Dehydrogenase Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

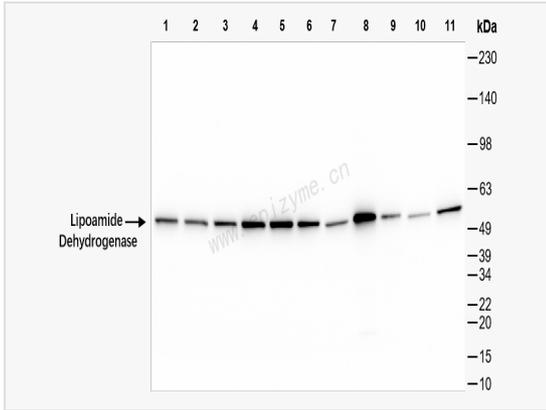
Catalog # R012122

## Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	70L14K72
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Lipoamide Dehydrogenase
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Lipoamide Dehydrogenase Rabbit mAb [70L14K72] is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Synonyms	Dehydrogenase complex, E3 component; Diaphorase; Dihydropolipoamide dehydrogenase; Dihydropolipoamide dehydrogenase; Dihydropolipoamide dehydrogenase mitochondrial; dld; DLDD; DLDH; DLDH_HUMAN; E3; E3 branched chain alpha-keto acid; E3 component of pyruvate dehydrogenase; E3 component of pyruvate dehydrogenase complex 2 oxo glutarate complex branched chain keto acid dehydrogenase complex; GCSL; Glycine cleavage system L protein; Glycine cleavage system protein L; LAD; lipoamide dehydrogenase; Lipoamide reductase; Lipoyl dehydrogenase; mitochondrial; OTTHUMP00000206744; OTTHUMP00000206746; OTTHUMP00000206748; OTTHUMP00000206749; PHE 3; PHE3; Pyruvate dehydrogenase component E3.
Calculated MW	Calculated MW: 54 kDa; Observed MW: 54 kDa
Uniprot ID	P09622
Gene ID	1738
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]
Cellular Location	Mitochondrion matrix.



Western Blot - Anti-Lipoamide Dehydrogenase Rabbit mAb [70L14K72]

All lanes: R012122 at 1:5,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: 293T (Human embryonic kidney cell) whole cell lysates

Lane 5: K562 (Human chronic myeloid leukemia cell) whole cell lysates

Lane 6: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates

Lane 7: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 8: Mouse heart whole tissue lysates

Lane 9: Mouse liver whole tissue lysates

Lane 10: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates

Lane 11: Rat brain whole tissue lysates

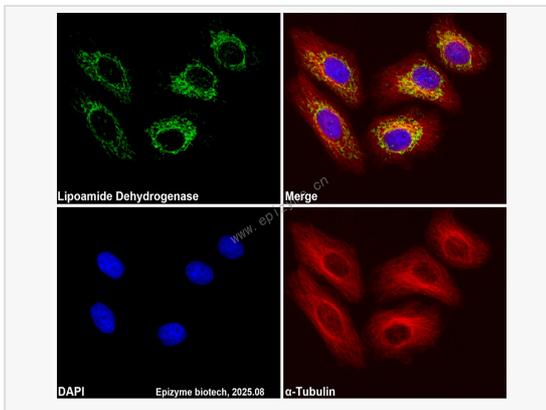
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 54 kDa

Observed band size: 54 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Lipoamide Dehydrogenase Rabbit mAb [70L14K72]

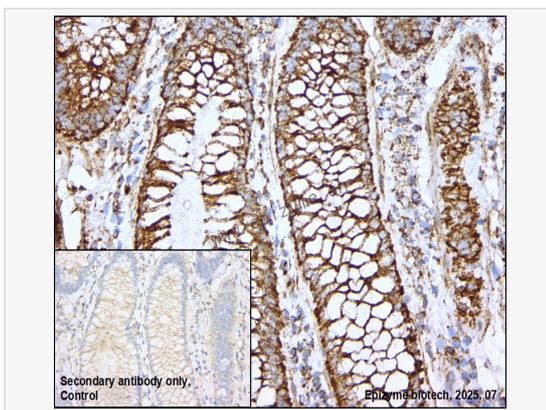
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R012122 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Lipoamide Dehydrogenase Rabbit mAb [70L14K72]

Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue  
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R012122 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution  
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.