abcam

Product datasheet

Anti-Lipoamide Dehydrogenase antibody [EPR6635] ab133551

KO VALIDATED Recombinant RabMAb

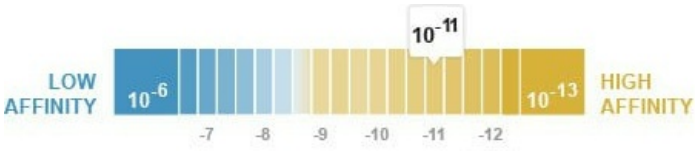
★★★★★ 1 Abreviews 12 References 6 Images

Overview

Product name	Anti-Lipoamide Dehydrogenase antibody [EPR6635]
Description	Rabbit monoclonal [EPR6635] to Lipoamide Dehydrogenase
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P **Unsuitable for:** Flow Cyt or IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat, HeLa, 293T, MCF7, and Caco-2 cell lysates. IHC-P: Human kidney and Human colon tissues
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	$K_D = 1.52 \times 10^{-11}$ M



Learn more about K_D

Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6635
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133551 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

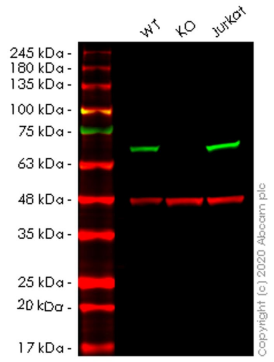
Application	Abreviews	Notes
WB	★★★★★ (1)	1/10000 - 1/50000. Detects a band of approximately 56 kDa (predicted molecular weight: 54 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt or IP.

Target

Function	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.
Involvement in disease	Note=Defects in DLD are involved in the development of congenital infantile lactic acidosis. Defects in DLD are a cause of maple syrup urine disease (MSUD) [MIM:248600]. MSUD is characterized by mental and physical retardation, feeding problems and a maple syrup odor to the urine. The keto acids of the branched-chain amino acids are present in the urine, resulting from a block in oxidative decarboxylation.
Sequence similarities	Belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family.
Post-translational modifications	Tyrosine phosphorylated.
Cellular localization	Mitochondrion matrix.

Images



Western blot - Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551)

All lanes : Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : DLD knockout HeLa cell lysate
Lane 3 : Jurkat cell lysate

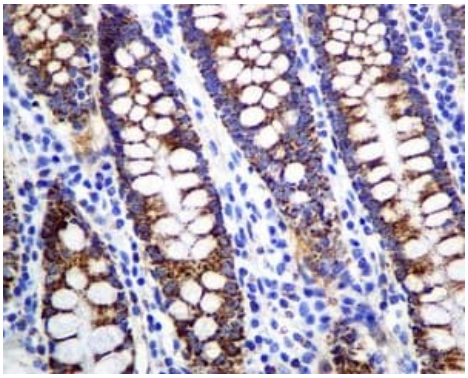
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 54 kDa
Observed band size: 56 kDa

Lanes 1-3: Merged signal (red and green). Green - ab133551 observed at 56 kDa. Red - loading control **ab8245** observed at 36 kDa.

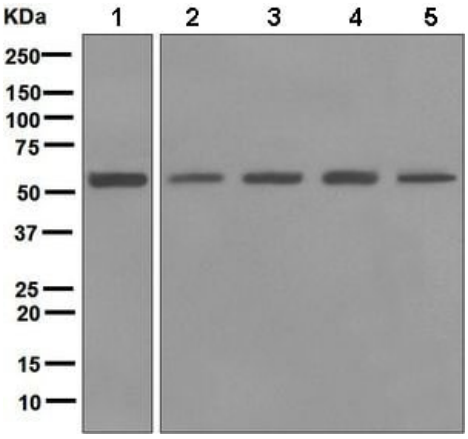
ab133551 Anti-Lipoamide Dehydrogenase antibody [EPR6635] was shown to specifically react with Lipoamide Dehydrogenase in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265535** (knockout cell lysate **ab257922**) was used. Wild-type and Lipoamide Dehydrogenase knockout samples were subjected to SDS-PAGE. ab133551 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551)

Immunohistochemical analysis of paraffin embedded Human colon tissue labelling Lipoamide Dehydrogenase with ab133551 antibody at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551)

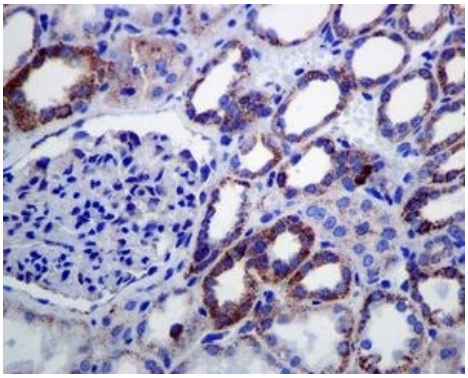
All lanes : Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551) at 1/10000 dilution

Lane 1 : Jurkat cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : 293T cell lysate
Lane 4 : MCF7 cell lysate
Lane 5 : Caco-2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

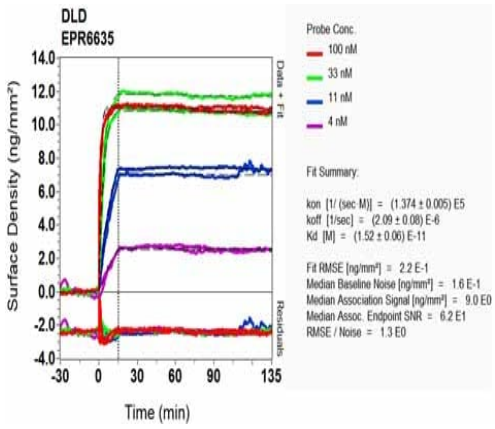
Predicted band size: 54 kDa
Observed band size: 56 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551)

Immunohistochemical analysis of paraffin embedded Human kidney tissue labelling Lipoamide Dehydrogenase with ab133551 antibody at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

Anti-Lipoamide Dehydrogenase antibody [EPR6635] (ab133551)

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