abcam

Product datasheet

Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y] ab53292





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Overview

Product name Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y]

Description Rabbit monoclonal [EP1565Y] to Lactate Dehydrogenase B/LDH-B

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt (Intra) or ICC/IF

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human Lactate Dehydrogenase B/LDH-B aa 1-100 (N terminal). The

exact sequence is proprietary.

Database link: P07195

Positive control WB: Hap1, HEK-293T and HeLa cell lysates. IHC-P: Human heart muscle.

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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EP1565Y

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab53292 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		1/50000 - 1/200000. Detects a band of approximately 37 kDa (predicted molecular weight: 37 kDa).
IHC-P	★★★★ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt (Intra) or ICC/IF.

Target

Pathway Fermentation; pyruvate fermentation to lactate; (S)-lactate from pyruvate: step 1/1.

Involvement in disease Note=Defects in LDHB result in deficiency of lactate dehydrogenase, a condition with no clear

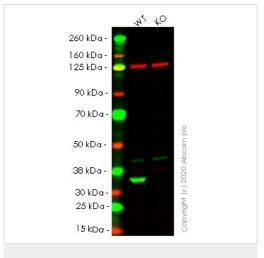
symptomatic consequences. Lactate dehydrogenase deficiency can probably be considered a

non-disease.

Sequence similarities Belongs to the LDH/MDH superfamily. LDH family.

Cellular localization Cytoplasm.

Images



Western blot - Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y] (ab53292)

All lanes : Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y] (ab53292) at 1/5000 dilution

Lane 1: Wild-type HEK-293T cell lysate

Lane 2: LDHB knockout HEK-293T cell lysate

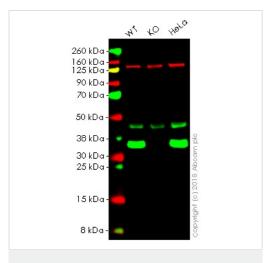
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 37 kDa **Observed band size:** 37 kDa

Lanes 1-2: Merged signal (red and green). Green - ab53292 observed at 37 kDa. Red - Anti-Vinculin antibody [VIN-54] observed at 124 kDa.

ab53292 was shown to react with Lactate Dehydrogenase B/LDH-B in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line ab255403 (knockout cell lysate ab263761) was used. Wild-type HEK-293T and LDHB knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab53292 and Anti-Vinculin antibody [VIN-54] overnight at 4°C at a 1 in 5000 dilution and a 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.



Western blot - Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y] (ab53292)

All lanes : Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y] (ab53292) at 1/50000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: LDHB (Lactate Dehydrogenase B) knockout HAP1 whole cell lysate

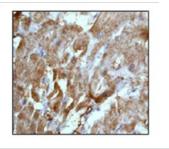
Lane 3: HeLa whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 37 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab53292 observed at 37 kDa. Red - loading control, <u>ab130007</u>, observed at 130 kDa.

ab53292 was shown to specifically react with Lactate
Dehydrogenase B in wild-type HAP1 cells as signal was lost in
LDHB (Lactate Dehydrogenase B) knockout cells. Wild-type and
LDHB (Lactate Dehydrogenase B) knockout samples were
subjected to SDS-PAGE. Ab53292 and ab130007 (Mouse antiVinculin loading control) were incubated overnight at 4°C at
1/50000 dilution and 1/20000 dilution respectively. Blots were
developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW)
preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye®
680RD) preabsorbed ab216776 secondary antibodies at 1/20000
dilution for 1 hour at room temperature before imaging.

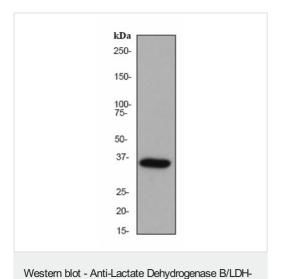


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y] (ab53292)

Human heart muscle labeled with ab53292 at 1/100 - 1/250 dilution

Perform heat mediated antigen retrieval with citrate buffer pH 6

before commencing with IHC staining protocol.



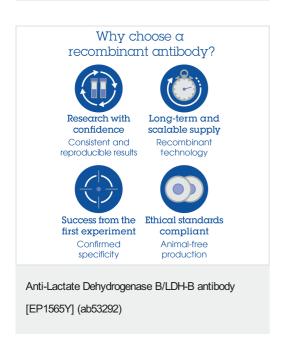
B antibody [EP1565Y] (ab53292)

Anti-Lactate Dehydrogenase B/LDH-B antibody [EP1565Y] (ab53292) + HeLa cell lysate at 10 µg

Secondary

Goat anti-rabbit HRP

Predicted band size: 37 kDa **Observed band size:** 37 kDa



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