abcam

Product datasheet

Anti-CD1a antibody [EP3091] ab76531

KO VALIDATED RabMAb

2 References 2 Images

Overview

Product name Anti-CD1a antibody [EP3091]

Rabbit monoclonal [EP3091] to CD1a **Description**

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt, IHC-P or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: MOLT4, K562, fetal thymus lysates, CD1A knockout Jurkat cell lysate and HeLa cell lysate

General notes Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

Purity Tissue culture supernatant

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Clonality Monoclonal
Clone number EP3091
Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab76531 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		1/1000 - 1/10000. Predicted molecular weight: 37 kDa.

Application notes Is unsuitable for Flow Cyt,IHC-P or IP.

Target

Function Antigen-presenting protein that binds self and non-self lipid and glycolipid antigens and presents

them to T-cell receptors on natural killer T-cells.

Tissue specificity Expressed on cortical thymocytes, epidermal Langerhans cells, dendritic cells, on certain T-cell

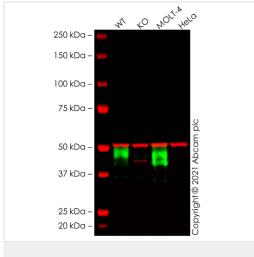
leukemias, and in various other tissues.

Sequence similarities Contains 1 lg-like (immunoglobulin-like) domain.

Cellular localizationCell membrane. Endosome membrane. Subject to intracellular trafficking between the cell

membrane and endosomes. Localizes to cell surface lipid rafts.

Images



Western blot - Anti-CD1a antibody [EP3091] (ab76531)

All lanes : Anti-CD1a antibody [EP3091] (ab76531) at 1/1000

dilution

Lane 1: Wild-type Jurkat cell lysate

Lane 2: CD1A knockout Jurkat cell lysate

Lane 3: MOLT-4 cell lysate

Lane 4: HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L preabsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L preabsorbed (<u>ab216776</u>) at 1/20000 dilution

Performed under reducing conditions.

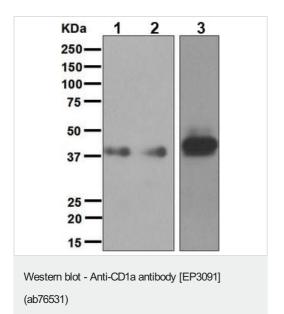
Predicted band size: 37 kDa

Observed band size: 45-50 kDa

False colour image of Western blot: Anti-CD1a antibody [EP3091] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (ab7291) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab76531 was shown to bind specifically to CD1a.

A band was observed at 45-50 kDa in wild-type Jurkat cell lysates with no signal observed at this size in CD1A knockout cell line **ab274926** (knockout cell lysate **ab274984**). To generate this image, wild-type and CD1A knockout Jurkat cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged.

Secondary antibodies used were Goat anti-Rabbit lgG H&L (IRDye $^{\scriptsize (B)}$ 800CW) preabsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye $^{\scriptsize (B)}$ 680RD) preabsorbed (<u>ab216776</u>) at 1/20000 dilution.



All lanes: Anti-CD1a antibody [EP3091] (ab76531) at 1/5000 dilution

Lane 1 : MOLT4 lysate
Lane 2 : K562 lysate

Lane 3: Fetal thymus lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 37 kDa Observed band size: 47 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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