

Product datasheet

Anti-CD1a antibody [EP3622] - BSA and Azide free ab217214

KO VALIDATED Recombinant RabMAb[®]

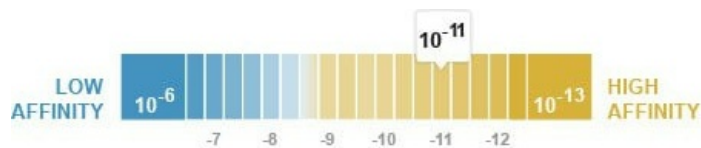
[1 References](#) [4 Images](#)

Overview

Product name	Anti-CD1a antibody [EP3622] - BSA and Azide free
Description	Rabbit monoclonal [EP3622] to CD1a - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human fetal thymus lysate, human T-78 cell lysate, human skin tissue.
General notes	<p>ab217214 is the carrier-free version of ab108309.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	K _D = 1.30 x 10 ⁻¹¹ M



[Learn more about K_D](#)

Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP3622
Isotype	IgG

Applications

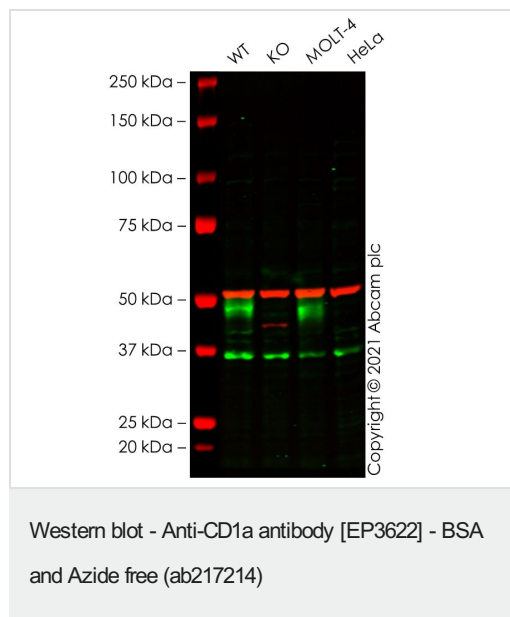
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab217214 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 37 kDa.
IHC-P		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.

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 Ig-like (immunoglobulin-like) domain.
Cellular localization	Cell membrane. Endosome membrane. Subject to intracellular trafficking between the cell membrane and endosomes. Localizes to cell surface lipid rafts.



All lanes : Anti-CD1a antibody [EP3622] ([ab108309](#)) 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

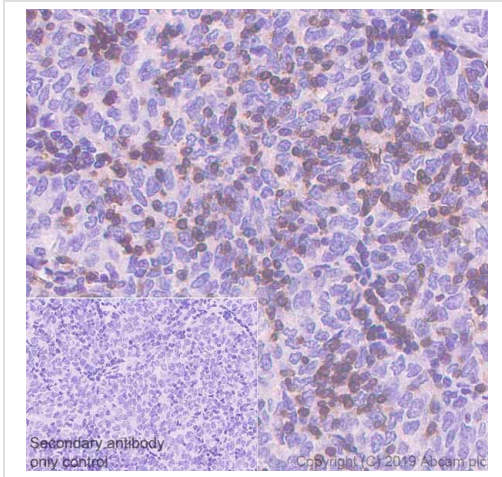
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 37 kDa

Observed band size: 45-50 kDa

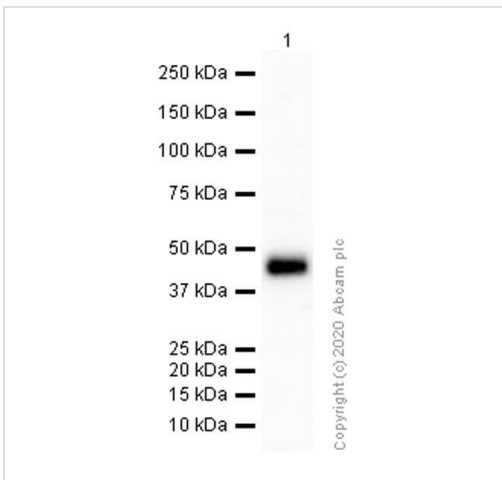
False colour image of Western blot: Anti-CD1a antibody [EP3622] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, [ab108309](#) was shown to bind specifically to CD1a. A band was observed 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 IgG H&L (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD1a antibody [EP3622]
- BSA and Azide free (ab217214)

This data was developed using [ab108309](#), the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thymoma tissue sections labeling CD1a with purified [ab108309](#) at 1/1000 dilution (0.14 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-CD1a antibody [EP3622] - BSA and Azide free (ab217214)

Anti-CD1a antibody [EP3622] ([ab108309](#)) at 1/1000 dilution (Purified) + Human thymus lysate at 15 µg

Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 37 kDa

Observed band size: 49 kDa

This data was developed using [ab108309](#), the same antibody clone in a different buffer formulation.

The molecular weight observed is consistent with what has been described in the literature (PMID: 18178838).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CD1a antibody [EP3622] - BSA and Azide free
(ab217214)

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

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