abcam

Product datasheet

Anti-CD48 antibody [EPR4108] - BSA and Azide free ab248658



5 Images

Overview

Product name Anti-CD48 antibody [EPR4108] - BSA and Azide free

Description Rabbit monoclonal [EPR4108] to CD48 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, IP

Unsuitable for: Flow Cyt

Species reactivity Reacts with: Human

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

Positive control WB: Raji, Ramos and NAMALWA whole cell lysates IP: Raji cells; IHC: human colon tissue,

human tonsil tissue.

General notes ab248658 is the carrier-free version of ab134049.

> 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

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.

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.

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**.

1

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR4108

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab248658 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. Detects a band of approximately 43 kDa (predicted molecular weight: 28 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt.

Target

Function Ligand for CD2. Might facilitate interaction between activated lymphocytes. Probably involved in

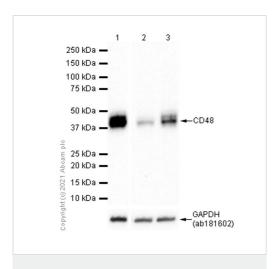
regulating T-cell activation.

Sequence similarities Contains 1 lg-like C2-type (immunoglobulin-like) domain.

Contains 1 lg-like V-type (immunoglobulin-like) domain.

Cellular localization Cell membrane.

Images



Western blot - Anti-CD48 antibody [EPR4108] - BSA and Azide free (ab248658)

All lanes : Anti-CD48 antibody [EPR4108] (<u>ab134049</u>) at 1/5000 dilution (Purified)

Lane 1 : Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lane 2 : Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lane 3 : NAMALWA (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

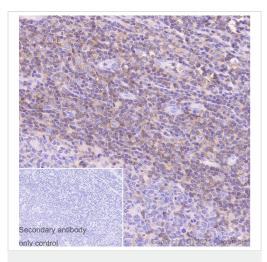
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 28 kDa **Observed band size:** 40-47 kDa

This data was developed using <u>ab134049</u>, the same antibody clone in a different buffer formulation.

CD48 exists as highly glycosylated protein on the cell surface. The molecule weight observed is consistent with what has been described in the literature (PMID: 24626474, 1383383, 10429668)

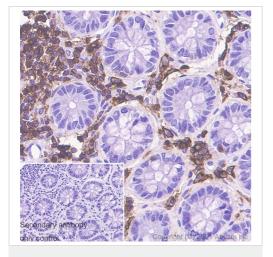


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD48 antibody

[EPR4108] - BSA and Azide free (ab248658)

This data was developed using <u>ab134049</u>, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling CD48 with Purified **ab134049** at 1:5000 dilution (0.37 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. PBS instead of the primary antibody was used as the negative control.

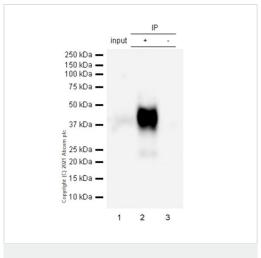


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD48 antibody

[EPR4108] - BSA and Azide free (ab248658)

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue sections labeling CD48 with Purified <u>ab134049</u> at 1:5000 dilution (0.37 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 (<u>ab209101</u>) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Immunoprecipitation - Anti-CD48 antibody
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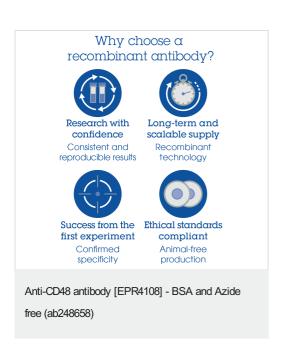
CD48 was immunoprecipitated from 0.35 mg Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate 10 µg with <u>ab134049</u> at 1/100 dilution. VeriBlot for IP Detection Reagent (HRP)(<u>ab131366</u>) was used at 1/5000 dilution.

Lane 1: Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate 10 μg

Lane 2: ab134049 IP in Raji whole cell lysate

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of $\underline{ab134049}$ in Raji whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.



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