

Product datasheet

Anti-CD2 antibody [EPR6451] - BSA and Azide free ab248400

Recombinant RabMAb

7 Images

Overview

Product name	Anti-CD2 antibody [EPR6451] - BSA and Azide free
Description	Rabbit monoclonal [EPR6451] to CD2 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP, Flow Cyt (Intra)
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human CD2 aa 200-350. The exact sequence is proprietary. Database link: P06729
Positive control	WB: Human Jurkat cell lysates. IHC: Human tonsil, colon and spleen tissue. IP: Jurkat lysate. Flow cyto: Jurkat (Human T cell leukemia T lymphocyte) cells
General notes	ab248400 is the carrier-free version of ab131276 .

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 cell-based 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](#).

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 +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6451
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab248400 in the following tested applications.

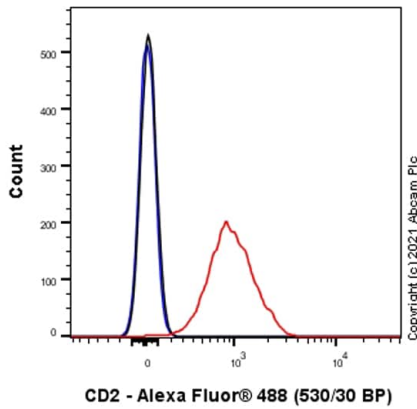
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 39 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.
IP		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.

Target

Function	CD2 interacts with lymphocyte function-associated antigen (LFA-3) and CD48/BCM1 to mediate adhesion between T-cells and other cell types. CD2 is implicated in the triggering of T-cells, the cytoplasmic domain is implicated in the signaling function.
Sequence similarities	Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Cellular localization	Membrane.

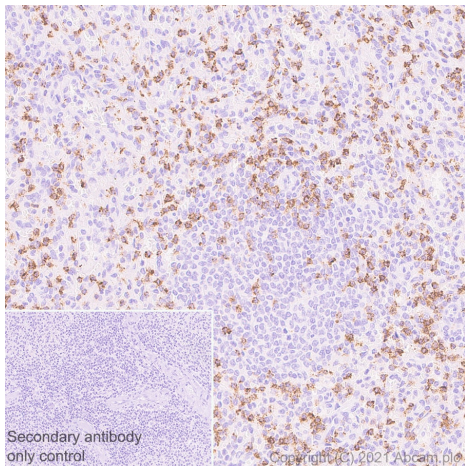
Images



Flow Cytometry (Intracellular) - Anti-CD2 antibody
[EPR6451] - BSA and Azide free (ab248400)

This data was developed using [ab131276](#), the same antibody clone in a different buffer formulation.

Intracellular Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling CD2 with purified [ab131276](#) at 1:20 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150081](#)) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as a isotype control. Cell without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.



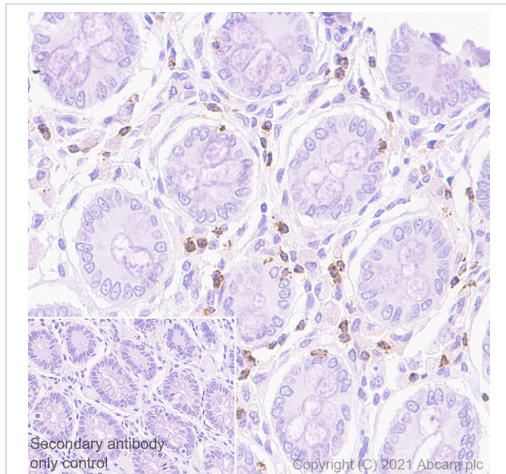
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD2 antibody [EPR6451]
- BSA and Azide free (ab248400)

This data was developed using [ab131276](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of Paraffin-embedded sections Human spleen tissue labelling CD2 with [ab131276](#) at 1/1000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Staining on Human spleen tissue is observed. Counter stained with Haematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



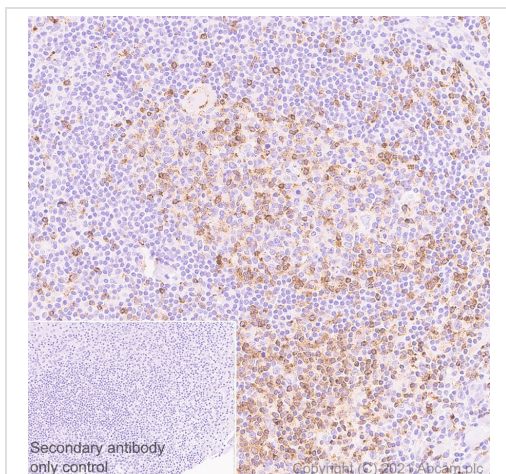
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD2 antibody [EPR6451]
- BSA and Azide free (ab248400)

This data was developed using [ab131276](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of Paraffin-embedded sections Human colon tissue labelling CD2 with [ab131276](#) at 1/1000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Staining on Human colon tissue is observed. Counter stained with Haematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



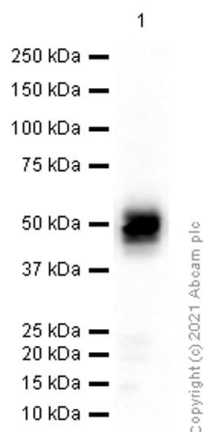
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD2 antibody [EPR6451]
- BSA and Azide free (ab248400)

This data was developed using [ab131276](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of Paraffin-embedded sections Human tonsil tissue labelling CD2 with [ab131276](#) at 1/1000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Staining on Human tonsil tissue is observed. Counter stained with Haematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-CD2 antibody [EPR6451] - BSA and Azide free (ab248400)

Anti-CD2 antibody [EPR6451] (**ab131276**) at 1/1000 dilution + Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

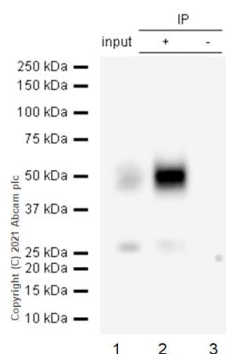
Predicted band size: 39 kDa

Observed band size: 45-58 kDa

This data was developed using **ab131276**, the same antibody clone in a different buffer formulation.

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

The molecular weight observed is consistent with what has been described in the literature (PMID: 10510361).



Immunoprecipitation - Anti-CD2 antibody [EPR6451] - BSA and Azide free (ab248400)

This data was developed using **ab131276**, the same antibody clone in a different buffer formulation.

CD2 was immunoprecipitated from 0.35 mg Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10 µg with **ab131276** at 1/50 dilution (2µg). VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/5000 dilution.

Lane 1: Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10 µg

Lane 2: abab131276 IP in Jurkat whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab131276** in Jurkat whole cell lysate

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

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-CD2 antibody [EPR6451] - BSA and Azide free
(ab248400)

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

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