abcam

Product datasheet

Anti-DC-SIGN antibody [EPR5588] - BSA and Azide free ab210401



4 Images

Overview

Product name Anti-DC-SIGN antibody [EPR5588] - BSA and Azide free

Description Rabbit monoclonal [EPR5588] to DC-SIGN - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

Does not react with: Mouse, Rat

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

Positive control WB: HACAT, fetal skin, fetal artery and Human small intestine lysates.

General notes ab210401 is the carrier-free version of ab124828.

> 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**.

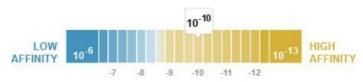
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Properties

Form Liquid

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

Dissociation constant (K_D) $K_D = 1.19 \times 10^{-10} M$



Learn more about K_D

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR5588

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab210401 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 50 kDa (predicted molecular weight: 46 kDa).

Application notes Is unsuitable for IHC-P.

Target

Function

Pathogen-recognition receptor expressed on the surface of immature dendritic cells (DCs) and involved in initiation of primary immune response. Thought to mediate the endocytosis of pathogens which are subsequently degraded in lysosomal compartments. The receptor returns to the cell membrane surface and the pathogen-derived antigens are presented to resting T-cells via MHC class II proteins to initiate the adaptive immune response. Probably recognizes in a calcium-dependent manner high mannose N-linked oligosaccharides in a variety of pathogen antigens, including HIV-1 gp120, HIV-2 gp120, SIV gp120, ebolavirus glycoproteins, cytomegalovirus gB, HCV E2, dengue virus gE, Leishmania pifanoi LPG, Lewis-x antigen in Helicobacter pylori LPS, mannose in Klebsiella pneumonae LPS, di-mannose and tri-mannose in Mycobacterium tuberculosis ManLAM and Lewis-x antigen in Schistosoma mansoni SEA.

On DCs it is a high affinity receptor for ICAM2 and ICAM3 by binding to mannose-like carbohydrates. May act as a DC rolling receptor that mediates transendothelial migration of DC

presursors from blood to tissues by binding endothelial ICAM2. Seems to regulate DC-induced T-cell proliferation by binding to ICAM3 on T-cells in the immunological synapse formed between

DC and T-cells.

Tissue specificity Predominantly expressed in dendritic cells and in DC-residing tissues. Also found in placental

macrophages, endothelial cells of placental vascular channels, peripheral blood mononuclear

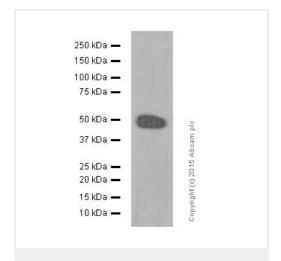
cells, and THP-1 monocytes.

Sequence similarities Contains 1 C-type lectin domain.

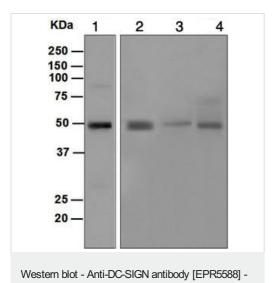
Domain The tandem repeat domain, also called neck domain, mediates oligomerization.

Cellular localization Secreted and Cell membrane.

Images



Western blot - Anti-DC-SIGN antibody [EPR5588] - BSA and Azide free (ab210401)



BSA and Azide free (ab210401)

Anti-DC-SIGN antibody [EPR5588] (<u>ab124828</u>) at 1/1000 dilution (purified) + Human skin tissue lysate at 20 µg

Secondary

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 46 kDa

This data was developed using <u>ab124828</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

All lanes : Anti-DC-SIGN antibody [EPR5588] (<u>ab124828</u>) at 1/1000 dilution (unpurified)

Lane 1: HACAT cell lysate

Lane 2: Fetal skin tissue lysate

Lane 3: Fetal artery tissue lysate

Lane 4: Human small intestine lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

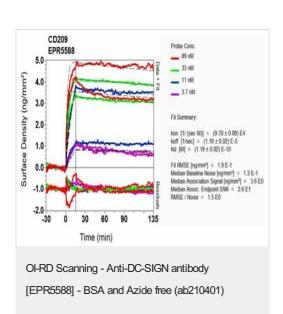
Predicted band size: 46 kDa **Observed band size:** 50 kDa

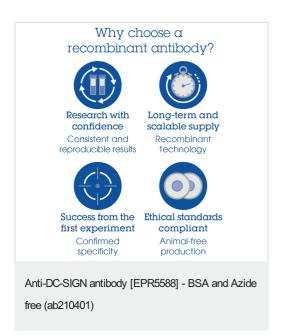
This data was developed using <u>ab124828</u>, the same antibody clone in a different buffer formulation.

This data was developed using $\underline{ab124828}$, the same antibody clone in a different buffer formulation. Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D





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