abcam

Product datasheet

Anti-DC-SIGN antibody [EPR5588] ab124828

Recombinant RabMAb

3 References 4 Images

Overview

Product name Anti-DC-SIGN antibody [EPR5588]

Description Rabbit monoclonal [EPR5588] to DC-SIGN

Host species Rabbit

Suitable for: WB **Tested applications**

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

Does not react with: Mouse, Rat

Immunogen Synthetic peptide within Human DC-SIGN aa 1-100. The exact sequence is proprietary.

Database link: Q9NNX6

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

General notes 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**.

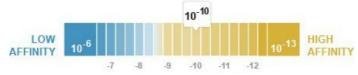
Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

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



Learn more about K_D

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

Purity Protein A purified

Clonality Monoclonal Clone number **EPR5588**

Isotype lgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab124828 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. 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 calciumdependent 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 Tcell 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.

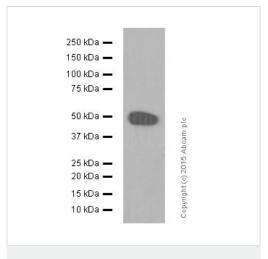
Domain

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

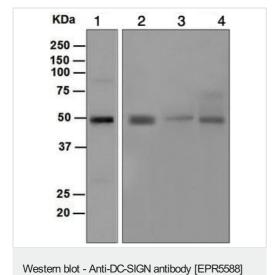
Cellular localization

Secreted and Cell membrane.

Images



Western blot - Anti-DC-SIGN antibody [EPR5588] (ab124828)



(ab124828)

Anti-DC-SIGN antibody [EPR5588] (ab124828) 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

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

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

Lane 1: HACAT cell lysate

Lane 2 : Fetal skin tissue lysate

Lane 3: Fetal artery tissue lysate

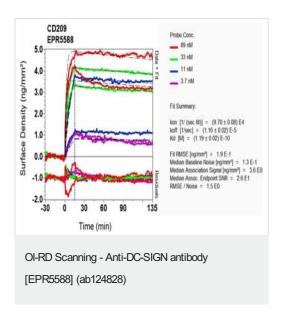
Lane 4: Human small intestine lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

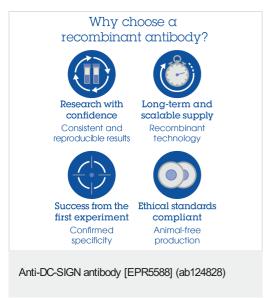
Predicted band size: 46 kDa Observed band size: 50 kDa



Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



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