

DC-SIGN Antibody

Catalog # ASC10125

Specification

DC-SIGN Antibody - Product Information

Application WB, IHC-P, E **Primary Accession** Q9NNX6

Other Accession Q9NNX6, 46396012

Reactivity Human Host **Rabbit** Clonality **Polyclonal** laG

Isotype

Calculated MW Predicted: 44 kDa

Observed: 47 kDa KDa

Application Notes DC-SIGN antibody can be used for

detection of DC-SIGN by Western blot at 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10

μg/mL.

DC-SIGN Antibody - Additional Information

Gene ID 30835

Other Names

DC-SIGN Antibody: CDSIGN, CLEC4L, DC-SIGN, DC-SIGN1, CD209 antigen, C-type lectin domain family 4 member L, CD209 molecule

Target/Specificity CD209:

Reconstitution & Storage

DC-SIGN antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

DC-SIGN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DC-SIGN Antibody - Protein Information

Name CD209

Synonyms CLEC4L

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.

Cellular Location

[Isoform 1]: Cell membrane; Single- pass type II membrane protein [Isoform 3]: Cell membrane; Single- pass type II membrane protein [Isoform 5]: Cell membrane; Single- pass type II membrane protein [Isoform 7]: Secreted. [Isoform 9]: Secreted.

Tissue Location

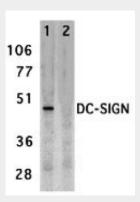
Predominantly expressed in dendritic cells and in DC-residing tissues. Also found in placental macrophages, endothelial cells of placental vascular channels, peripheral blood mononuclear cells, and THP-1 monocytes.

DC-SIGN Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

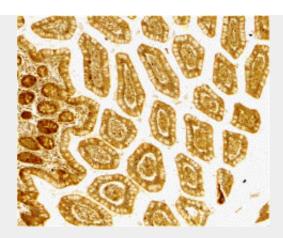
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DC-SIGN Antibody - Images



Western blot analysis of DC-SIGN expression in human placenta tissue lysate in the absence (lane 1) and presence (lane 2) of blocking peptide with DC-SIGN antibody at 2 µg /ml.





Immunohistochemistry of DC-SIGN in human small intestine tissue with DC-SIGN antibody at 10 $\mu g/mL$.

DC-SIGN Antibody - Background

DC-SIGN Antibody: Dendritic cells (DCs) that control immune responses were recently found to capture and transport HIV from the mucosal area to remote lymph nodes, where DCs hand over HIV to CD4+ T lymphocytes. DCs also amplify the amount of virus and extend the duration of viral infectivity. Multiple strains of HIV-1, HIV-2 and SIV bind to DCs via DC-SIGN. ICAM-3 is the natural ligand for DC-SIGN. A DC-SIGN homologue (termed DC-SIGNR, L-SIGN, and DC-SIGN2) was identified recently. DC-SIGN forms a novel gene family with DC-SIGNR and many alternatively spliced isoforms of DC-SIGN and DC-SIGNR. The expression of DC-SIGN was found in mucosal tissues including placenta, small intestine, and rectum.

DC-SIGN Antibody - References

Geijtenbeek TB, Kwon DS, Torensma R, et al. DC-SIGN, a dendritic cell-specific HIV-1-binding protein that enhances trans-infection of T cells. Cell 2000;100:587-97. Pohlmann S, Baribaud F, Lee B, et al. RW. DC-SIGN interactions with human immunodeficiency virus type 1 and 2 and simian immunodeficiency virus. J. Virol. 2001; 75:4664-72. Geijtenbeek TB, Torensma R, van Vliet SJ, et al. Identification of DC-SIGN, a novel dendritic cell-specific ICAM-3 receptor that supports primary immune responses. Cell 2000; 100:575-85. Soilleux EJ, Barten R, and Trowsdale J. DC-SIGN; a related gene, DC-SIGNR; and CD23 form a cluster on 19p13. J. Immunol. 2000; 165:2937-42.