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DC-SIGN Antibody [5D7]

Catalog # ASC11972

Product Information

Application	WB, E, IHC-P
Primary Accession	Q9NNX6
Other Accession	Q9NNX6, 46396012
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5D7
Calculated MW	45775
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DC-SIGN antibody can be used for detection of DC-SIGN in Western Blot at 1 - 2 □g/mL and in immunohistochemistry at 5 - 10 □g/mL.

Additional Information

Gene ID	30835
Other Names	CD209 antigen, C-type lectin domain family 4 member L, Dendritic cell-specific ICAM-3-grabbing non-integrin 1, DC-SIGN, DC-SIGN1, CD209, CD209, CLEC4L
Target/Specificity	CD209;
Reconstitution & Storage	DC-SIGN monoclonal antibody can be stored at -20℃, stable for one year.
Precautions	DC-SIGN Antibody [5D7] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD209 (HGNC:1641)
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]: Membrane raft; 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. [Isoform 11]: 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.

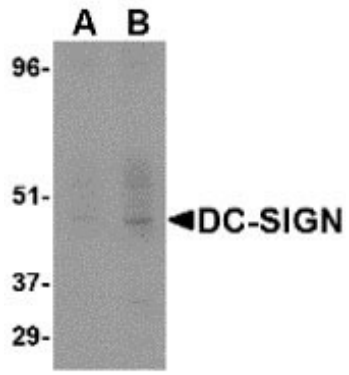
Background

DC-SIGN Monoclonal 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.

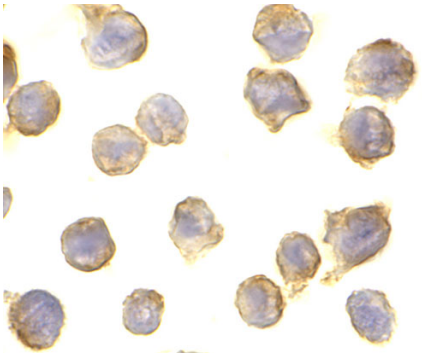
References

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. 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, Trowsdale J. DC-SIGN; a related gene, DC-SIGNR; and CD23 form a cluster on 19p13. J. Immunol. 2000; 165:2937-42.

Images



Western blot analysis of DC-SIGN in human placenta tissue lysate at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of DC-SIGN in lymph node tissue with DC-SIGN antibody at 5 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.