

# Anti-CD209 / DC-SIGN Antibody

Mouse Monoclonal Antibody Catalog # AH13293

### **Product Information**

Application	IHC-P, IF, FC
Primary Accession	<u>Q9NNX6</u>
Other Accession	<u>278694</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	C209/1781
Calculated MW	45775

#### **Additional Information**

Gene ID	30835
Other Names	CD209; CDSIGN; CIRE; CLEC4L; DC-SIGN; DC-SIGN1; DCSIGN; Dendritic cell-specific ICAM-3 Grabbing Non-integrin 1; HIV GP120 Binding Protein; SIGN-R1; SIGNR5
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Tris with 1mM EDTA Buffer, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-CD209 / DC-SIGN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **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. [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 is a transmembrane receptor that is expressed on the surface of dendritic cells and macrophages. It is involved in the innate immune system and recognizes numerous evolutionarily divergent pathogens ranging from parasites to viruses. The protein is organized into three distinct domains: an N-terminal transmembrane domain, a tandem-repeat neck domain and C-type lectin carbohydrate recognition domain. The extracellular region consisting of the C-type lectin and neck domains has a dual function as a pathogen recognition receptor and a cell adhesion receptor by binding carbohydrate ligands on the surface of microbes and endogenous cells. The neck region is important for homo-oligomerization, which allows the receptor to bind multivalent ligands with high avidity.

#### Images



Formalin-fixed, paraffin-embedded human Lung Carcinoma stained with CD209 Monoclonal Antibody (C209/1781).

Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with CD209 Monoclonal Antibody (C209/1781).

Formalin-fixed, paraffin-embedded human Small Intestine stained with CD209 Monoclonal Antibody (C209/1781).



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