

## **CD209 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9456C

## Specification

# **CD209 Antibody (Center) - Product Information**

WB,E
<u>Q9NNX6</u>
Human
Rabbit
Polyclonal
Rabbit IgG
45775
330-355

# **CD209 Antibody (Center) - 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

This CD209 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 330-355 amino acids from the Central region of human CD209.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

CD209 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **CD209 Antibody (Center) - 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.

## **CD209 Antibody (Center) - Protocols**

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

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

# CD209 Antibody (Center) - Images



Western blot analysis of CD209 Antibody (Center) (Cat. #AP9456c) in HL-60 cell line lysates (35ug/lane). CD209 (arrow) was detected using the purified Pab.

# CD209 Antibody (Center) - Background

CD209 encodes a transmembrane receptor and is often referred to as DC-SIGN because of its expression on the surface of dendritic cells and macrophages. The encoded protein is involved in the innate immune system and recognizes numerous evolutionarily divergent pathogens ranging from parasites to viruses with a large impact on public health. 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. Variations in the number of 23 amino acid repeats in the neck domain of this protein are rare but have a significant impact on ligand binding ability. This gene is closely related in terms of both sequence and function to a neighboring gene (GeneID 10332; often referred to as L-SIGN). DC-SIGN and L-SIGN differ in their ligand-binding properties and distribution.

# CD209 Antibody (Center) - References

Mosbruger, T.L., et al. J. Infect. Dis. 201(9):1371-1380(2010) Hsu, S.C., et al. J. Biol. Chem. 285(11):7903-7910(2010) Khoo, U.S., et al. J. Mol. Med. 86(8):861-874(2008) Feinberg, H., et al. J. Biol. Chem. 280(2):1327-1335(2005) Appelmelk, B.J., et al. J. Immunol. 170(4):1635-1639(2003) Engering, A., et al. J. Immunol. 168(5):2118-2126(2002)