

CD209 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9456c**Specification**

CD209 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q9NNX6](#)**CD209 Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CD209 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CD209 Antibody (Center) Blocking Peptide - Images

CD209 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)