

CLEC4D Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP17517c

Specification

CLEC4D Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q8WXI8</u>

CLEC4D Antibody (Center) Blocking Peptide - Additional Information

Gene ID 338339

Other Names

C-type lectin domain family 4 member D, C-type lectin superfamily member 8, C-type lectin-like receptor 6, CLEC-6, CLEC4D, CLECSF8, MCL

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.

CLEC4D Antibody (Center) Blocking Peptide - Protein Information

Name CLEC4D (<u>HGNC:14554</u>)

Function

Calcium-dependent lectin that acts as a pattern recognition receptor (PRR) of the innate immune system: recognizes damage- associated molecular patterns (DAMPs) of pathogen-associated molecular patterns (PAMPs) of bacteria and fungi (PubMed:23602766, PubMed:23911656). The PAMPs include alpha-mannans on C.albicans hypheas and mycobacterial trehalose 6,6'-dimycolate (TDM) (PubMed:23602766, PubMed:23911656). Interacts with signaling adapter Fc receptor gamma chain/FCER1G, likely via CLEC4E, to form a functional complex in myeloid cells (By similarity). Binding of mycobacterial TDM or C.albicans alpha-mannans to this receptor complex leads to phosphorylation of the immunoreceptor tyrosine-based activation motif (ITAM) of FCER1G, triggering activation of SYK, CARD9 and NF-kappa-B, consequently driving maturation of antigen-presenting cells and shaping antigen-specific priming of T-cells toward effector T-helper 1 and T- helper 17 cell subtypes (PubMed:23602766, PubMed:23602766, PubMed:23602766, PubMed:23602766, PubMed:23602766, PubMed:23602766, PubMed:23911656, PubMed:23911656, PubMed:23911656). The heterodimer formed with CLEC6A is active against fungal infection (PubMed:<a



href="http://www.uniprot.org/citations/23911656" target="_blank">23911656). Functions as an endocytic receptor (PubMed:14971047). May be involved in antigen uptake at the site of infection, either for clearance of the antigen, or for processing and further presentation to T-cells (PubMed:14971047).

Cellular Location

Cell membrane; Single-pass type II membrane protein

Tissue Location

Expressed weakly in peripheral blood leukocytes, bone marrow and spleen. Expression is confined mostly in monocytes and macrophage and seems to be up-regulated by IL-6, IL-10, TNF-alpha and IFN-gamma.

CLEC4D Antibody (Center) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

CLEC4D Antibody (Center) Blocking Peptide - Images

CLEC4D Antibody (Center) Blocking Peptide - Background

This gene encodes a member of the C-type lectin/C-typelectin-like domain (CTL/CTLD) superfamily. Members of this familyshare a common protein fold and have diverse functions, such ascell adhesion, cell-cell signalling, glycoprotein turnover, androles in inflammation and immune response. This gene is closelylinked to other CTL/CTLD superfamily members on chromosome 12p13 inthe natural killer gene complex region.

CLEC4D Antibody (Center) Blocking Peptide - References

Flornes, L.M., et al. Immunogenetics 56(7):506-517(2004)Arce, I., et al. Eur. J. Immunol. 34(1):210-220(2004)Ebner, S., et al. Proteins 53(1):44-55(2003)Drickamer, K. Curr. Opin. Struct. Biol. 9(5):585-590(1999)