

CLEC7A Antibody (N-term) Blocking peptide Synthetic peptide Catalog # BP13369a

Specification

CLEC7A Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>Q9BXN2</u>

CLEC7A Antibody (N-term) Blocking peptide - Additional Information

Gene ID 64581

Other Names

C-type lectin domain family 7 member A, Beta-glucan receptor, C-type lectin superfamily member 12, Dendritic cell-associated C-type lectin 1, DC-associated C-type lectin 1, Dectin-1, CLEC7A, BGR, CLECSF12, DECTIN1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13369a was selected from the N-term region of CLEC7A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CLEC7A Antibody (N-term) Blocking peptide - Protein Information

Name CLEC7A (HGNC:14558)

Function

Lectin that functions as a pattern recognizing receptor (PRR) specific for beta-1,3-linked and beta-1,6-linked glucans, which constitute cell wall constituents from pathogenic bacteria and fungi (PubMed:11567029, PubMed:12423684). Necessary for the TLR2-mediated inflammatory response and activation of NF-kappa-B: upon beta-glucan binding, recruits SYK via its ITAM motif and promotes a signaling cascade that activates some CARD domain-BCL10-MALT1 (CBM) signalosomes, leading to the activation of NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways which stimulate expression of genes encoding pro-inflammatory cytokines and chemokines (By similarity). Enhances cytokine production in macrophages and dendritic cells (By similarity). Mediates phagocytosis of



C.albicans conidia (PubMed:17230442). Binds T-cells in a way that does not involve their surface glycans and plays a role in T-cell activation. Stimulates T-cell proliferation. Induces phosphorylation of SCIMP after binding beta-glucans (By similarity).

Cellular Location

Cell membrane; Single-pass type II membrane protein [Isoform 6]: Cytoplasm.

Tissue Location

Highly expressed in peripheral blood leukocytes and dendritic cells. Detected in spleen, bone marrow, lung, muscle, stomach and placenta.

CLEC7A Antibody (N-term) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

CLEC7A Antibody (N-term) Blocking peptide - Images

CLEC7A Antibody (N-term) Blocking peptide - Background

This gene encodes a member of the C-type lectin/C-typelectin-like domain (CTL/CTLD) superfamily. The encoded glycoproteinis a small type II membrane receptor with an extracellular C-typelectin-like domain fold and a cytoplasmic domain with animmunoreceptor tyrosine-based activation motif. It functions as apattern-recognition receptor that recognizes a variety ofbeta-1,3-linked and beta-1,6-linked glucans from fungi and plants, and in this way plays a role in innate immune response. Alternatetranscriptional splice variants, encoding different isoforms, havebeen characterized. This gene is closely linked to other CTL/CTLDsuperfamily members on chromosome 12p13 in the natural killer genecomplex region.

CLEC7A Antibody (N-term) Blocking peptide - References

de Koning, H.D., et al. J. Invest. Dermatol. 130(11):2611-2620(2010)Plantinga, T.S., et al. J. Acquir. Immune Defic. Syndr. 55(1):87-94(2010)Cunha, C., et al. Blood (2010) In press :van der Velden, W.J., et al. Clin. Immunol. 136(2):302-306(2010)Kankkunen, P., et al. J. Immunol. 184(11):6335-6342(2010)