

### CLEC7A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13369a

### Specification

## **CLEC7A Antibody (N-term) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>O9BXN2</u> <u>NP\_072092.2</u>, <u>NP\_922940.1</u>, <u>NP\_922939.1</u> Human Rabbit Polyclonal Rabbit IgG 27627 70-98

### CLEC7A Antibody (N-term) - 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

This CLEC7A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 70-98 amino acids from the N-terminal region of human CLEC7A.

**Dilution** IHC-P~~1:10~50 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**

CLEC7A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **CLEC7A Antibody (N-term) - 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:<u>11567029</u>, PubMed:<u>12423684</u>). 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 production of reactive oxygen species in the cell (By similarity). Mediates phagocytosis of C.albicans conidia (PubMed:<u>17230442</u>). 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**

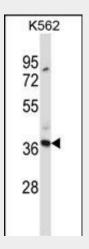
Highly expressed in peripheral blood leukocytes and dendritic cells. Detected in spleen, bone marrow, lung, muscle, stomach and placenta.

## CLEC7A Antibody (N-term) - Protocols

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

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

### CLEC7A Antibody (N-term) - Images



CLEC7A Antibody (N-term) (Cat. #AP13369a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the CLEC7A antibody detected the CLEC7A protein (arrow).





CLEC7A Antibody (N-term) (Cat. #AP13369a)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CLEC7A Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# CLEC7A Antibody (N-term) - Background

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

## **CLEC7A Antibody (N-term) - 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)