

### CLEC7A / Dectin 1 Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS15621

## **Specification**

# CLEC7A / Dectin 1 Antibody (Internal) - Product Information

Application IHC, IF, WB
Primary Accession Q9BXN2
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 28kDa KDa

# CLEC7A / Dectin 1 Antibody (Internal) - 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**

Human CLEC7A / Dectin 1. Multiple isoforms of CLEC7A are known to exist. Immunogenic peptide is conserved among isoforms 1, 3, and 4 (Q9BXN2).

### **Reconstitution & Storage**

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

#### **Precautions**

CLEC7A / Dectin 1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

# CLEC7A / Dectin 1 Antibody (Internal) - 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:<a href="http://www.uniprot.org/citations/11567029" target="\_blank">11567029</a>, PubMed:<a href="http://www.uniprot.org/citations/12423684" target="\_blank">12423684</a>). 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:<a href="http://www.uniprot.org/citations/17230442" target="\_blank">17230442</a>). 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**

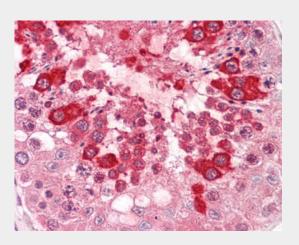
Highly expressed in peripheral blood leukocytes and dendritic cells. Detected in spleen, bone marrow, lung, muscle, stomach and placenta.

## CLEC7A / Dectin 1 Antibody (Internal) - Protocols

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

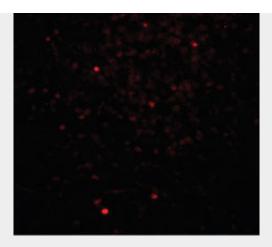
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# CLEC7A / Dectin 1 Antibody (Internal) - Images

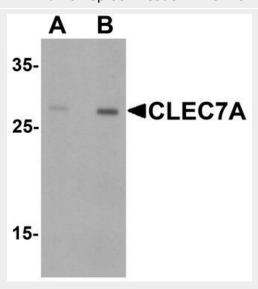


Anti-CLEC7A / Dectin 1 antibody IHC staining of human testis.





Immunofluorescence of CLEC7A in human spleen tissue withCLEC7A antibody at 20 ug/ml.



Western blot analysis of CLEC7A in rat spleen tissue lysate with CLEC7A antibody at (A) 1 and...

# CLEC7A / Dectin 1 Antibody (Internal) - Background

Lectin that functions as pattern receptor specific for beta-1,3-linked and beta-1,6-linked glucans, such as cell wall constituents from pathogenic bacteria and fungi. Necessary for the TLR2-mediated inflammatory response and for TLR2-mediated activation of NF-kappa-B. Enhances cytokine production in macrophages and dendritic cells. Mediates production of reactive oxygen species in the cell. Mediates phagocytosis of C.albicans conidia. 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 (By similarity).

## CLEC7A / Dectin 1 Antibody (Internal) - References

Sobanov Y., et al.Eur. J. Immunol. 31:3493-3503(2001). Yokota K., et al.Gene 272:51-60(2001). Hermanz-Falcon P., et al.Immunogenetics 53:288-295(2001). Willment J.A., et al.J. Biol. Chem. 276:43818-43823(2001). Gruenebach F., et al.Exp. Hematol. 30:1309-1315(2002).