

CLEC4D Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17517c

Specification

CLEC4D Antibody (Center) - Product Information

WB,E Application **Primary Accession Q8WXI8** Other Accession NP 525126.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 24704 Antigen Region 126-153

CLEC4D Antibody (Center) - 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

Target/Specificity

This CLEC4D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 126-153 amino acids from the Central region of human CLEC4D.

Dilution

WB~~1:1000

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

CLEC4D Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CLEC4D Antibody (Center) - Protein Information

Name CLEC4D (HGNC:14554)

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:23911656). The heterodimer formed with CLEC6A is active against fungal infection (PubMed: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

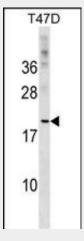
Expressed weakly in peripheral blood leukocytes, bone marrow and spleen. Expression is confined mostly in monocytes and macrophage and seems to be up-regulated by IL-6, IL-10, TNF-alpha and IFN-gamma.

CLEC4D Antibody (Center) - Protocols

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

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

CLEC4D Antibody (Center) - Images



CLEC4D Antibody (Center) (Cat. #AP17517c) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the CLEC4D antibody detected the CLEC4D protein (arrow).



CLEC4D Antibody (Center) - Background

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

CLEC4D Antibody (Center) - 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)