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CLEC12A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP10037c

Specification

CLEC12A Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q5QGZ9
Other Accession	NP_612210.4, NP_963917.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**178-206**

CLEC12A Antibody (Center) - Additional Information

Gene ID 160364

Other Names
C-type lectin domain family 12 member A, C-type lectin-like molecule 1, CLL-1, Dendritic cell-associated lectin 2, DCAL-2, Myeloid inhibitory C-type lectin-like receptor, MICL, CLEC12A, CLL1, DCAL2, MICL

Target/Specificity
This CLEC12A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 178-206 amino acids from the Central region of human CLEC12A.

Dilution
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
CLEC12A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CLEC12A Antibody (Center) - Protein Information

Name CLEC12A {ECO:0000303|PubMed:16838277, ECO:0000312|HGNC:HGNC:31713}

Function Myeloid inhibitory C-type lectin receptor that acts as a negative regulator of myeloid cell activation (PubMed:14739280, PubMed:15238421, PubMed:16239426, PubMed:34234773, PubMed:38367667, PubMed:38386511, PubMed:39143217). Myeloid cell inhibition is required to limit proinflammatory pathways and protect against excessive inflammation (By similarity). Specifically recognizes and binds various structures, such as neutrophil extracellular traps (NETs) or monosodium urate crystals (PubMed:38367667, PubMed:38386511, PubMed:39143217). Also acts as a pattern-recognition receptor for pathogen-associated molecules, such as plasmodium hemozoin or mycobacterial micolic acid (PubMed:31269448, PubMed:36542980). Ligand-binding induces phosphorylation of its ITIM motif, followed by recruitment of tyrosine- protein phosphatases PTPN6 and PTPN11, which counteract tyrosine- protein kinase SYK, thereby preventing myeloid cell activation (PubMed:14739280, PubMed:16239426, PubMed:34234773). Acts as a pattern- recognition receptor for NETs in neutrophils: specifically recognizes DNA in NETs, leading to inhibit neutrophil activation and limit further NET formation (PubMed:39143217). This regulation is essential for controlling key neutrophil responses and limit NET-mediated inflammatory conditions (By similarity). Also recognizes dead cells by acting as a receptor for monosodium urate crystals, leading to down- regulate neutrophil activation (PubMed:38367667, PubMed:38386511). Binding to monosodium urate crystals also promotes the type I interferon response (By similarity). Acts as an inhibitor of natural killer (NK) cell cytotoxicity (PubMed:15238421). Also acts as an ihibitor of dendritic cell maturation in an IL10-dependent manner (PubMed:16239426).

Cellular Location
Cell membrane; Single-pass type II membrane protein. Note=Ligand binding leads to internalization (PubMed:16239426). Clusters at phagocytic vesicles upon monosodium urate crystal-binding (PubMed:38367667)

Tissue Location
Preferentially expressed in lymphoid tissues and immune cells, including natural killer (NK) cells, T-cells, dendritic cells and monocytes or macrophages (PubMed:14739280, PubMed:15238421, PubMed:15548716, PubMed:16239426, PubMed:16838277). Detected in spleen macrophage-rich red pulp and in lymph node (at protein level) (PubMed:16838277). Detected in peripheral blood leukocytes, dendritic cells, bone marrow, monocytes, mononuclear leukocytes and macrophages (PubMed:16838277).

CLEC12A Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CLEC12A Antibody (Center) - Images

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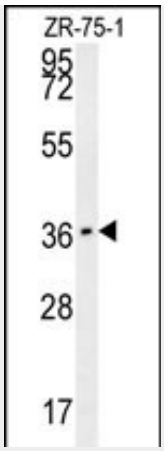

CLEC12A Antibody (Center) (Cat. #AP10037c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the CLEC12A antibody detected the CLEC12A protein (arrow).