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CLEC10A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10558a

Specification

CLEC10A Antibody (N-term) - Product Information

Application FC, WB, E **Primary Accession 08IUN9**

Other Accession NP 878910.1, NP 006335.2

Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 35446 Antigen Region 1-30

CLEC10A Antibody (N-term) - Additional Information

Gene ID 10462

Other Names

C-type lectin domain family 10 member A, C-type lectin superfamily member 14, Macrophage lectin 2, CD301, CLEC10A, CLECSF13, CLECSF14, HML

Target/Specificity

This CLEC10A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CLEC10A.

Dilution

FC~~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

CLEC10A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLEC10A Antibody (N-term) - Protein Information

Name CLEC10A {ECO:0000303|PubMed:33724805}



Function C-type lectin receptor involved in recognition of N- acetylgalactosamine (GalNAc)-terminated glycans by myeloid antigen presenting cells (APCs) (PubMed:15802303, PubMed:16998493, PubMed:17616966, PubMed:22213806, PubMed:33724805, PubMed:8598452). Binds in a Ca(2+)-dependent manner to alpha- and beta-linked GalNAc residues on glycoprotein and glycolipid antigens, including alphaGalNAc- and Galbeta1->3GalNAc-O-Ser/Thr also known as Tn and T antigens, LacdiNAc epitope GalNAcbeta1->4GlcNAc and its derivative GalNAcbeta1->4-(Fucalpha1->3)GlcNAc, O-linked core 5 and 6 glycans, and GM2 and GD2 gangliosides (PubMed: 15802303, PubMed: 23507963). Acts as a signaling receptor at the interface of APC-T cell interactions. On immature dendritic cells, recognizes Tn antigen-carrying PTPRC/CD45 receptor on effector T cells and downregulates PTRPN/CD45 phosphatase activity with an impact on T cell activation threshold, cytokine production and proliferation. Modulates dendritic cell maturation toward a tolerogenic phenotype leading to generation of regulatory CD4positive T cell subset with immune suppressive functions (PubMed: 15802303, PubMed: 16998493, PubMed: 22213806). Acts as an endocytic pattern recognition receptor involved in antitumor immunity. During tumorigenesis, recognizes Tn antigens and its sialylated forms Neu5Ac-Tn and Neu5Gc-Tn expressed on tumor cell mucins. On immature dendritic cells, can internalize Tn-terminated immunogens and target them to endolysosomal compartment for MHC class I and II antigen presentation to CD8-positive and CD4-positive T cells, respectively (PubMed: 15802303, PubMed: 17616966, PubMed: 17804752).

Cellular Location

Cell membrane; Single-pass type II membrane protein. Early endosome membrane; Single-pass type II membrane protein Lysosome membrane; Single-pass type II membrane protein. Note=Recycles between the plasma membrane and the endolysosomal compartment. Upon antigen binding, internalizes via endocytosis and then dissociates from antigen at acidic pH characteristic of endolysosomal vesicles

Tissue Location

Expressed in myeloid antigen presenting cells in lymph nodes and skin (at protein level). Expressed in dermal dendritic cells (at protein level).

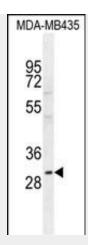
CLEC10A Antibody (N-term) - Protocols

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

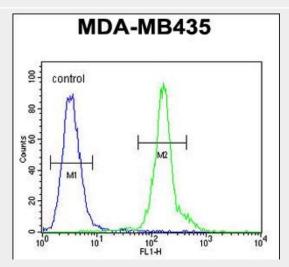
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CLEC10A Antibody (N-term) - Images





CLEC10A Antibody (N-term) (Cat. #AP10558a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the CLEC10A antibody detected the CLEC10A protein (arrow).



CLEC10A Antibody (N-term) (Cat. #AP10558a) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CLEC10A Antibody (N-term) - Background

CLEC10A 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. The encoded type 2 transmembrane protein may function as a cell surface antigen. Two transcript variants encoding distinct isoforms have been identified for this gene.

CLEC10A Antibody (N-term) - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010) lijima, M., et al. Neurology 73(17):1348-1352(2009) van Vliet, S.J., et al. PLoS Pathog. 5 (10), E1000625 (2009) : Suzuki, N., et al. J. Immunol. 156(1):128-135(1996)