

## CLEC10A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10558a

### Specification

## **CLEC10A Antibody (N-term) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region FC, WB,E <u>O8IUN9</u> <u>NP\_878910.1</u>, <u>NP\_006335.2</u> Human Rabbit Polyclonal Rabbit IgG 35446 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**

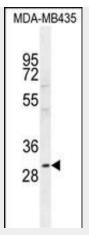
Expressed in myeloid antigen presenting cells in lymph nodes and skin (at protein level). Expressed in dermal dendritic cells (at protein level).

## **CLEC10A Antibody (N-term) - Protocols**

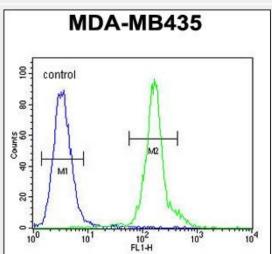
Provided below are standard protocols that you may find useful for product applications.

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

## 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)