

CLEC10A Antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI15484

Product Information

Application WB
Primary Accession Q8IUN9
Other Accession NP_878910
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 35446

Additional Information

Gene ID 10462

Alias Symbol CLEC10A, CLECSF13, CLECSF14, HML,

Other Names C-type lectin domain family 10 member A, C-type lectin superfamily member

14, Macrophage lectin 2, CD301, CLEC10A, CLECSF13, CLECSF14, HML

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 &mu, I of distilled water. Final Anti-CLEC10A antibody concentration is

1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

-20°C. Avoid repeat freeze-thaw cycles.

Precautions CLEC10A Antibody - N-terminal region is for research use only and not for use

in diagnostic or therapeutic procedures.

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:<u>22213806</u>, PubMed:<u>33724805</u>, PubMed:<u>8598452</u>). Binds in a Ca(2+)-dependent manner to alpha- and beta-linked GalNAc residues on

glycoprotein and glycolipid antigens, including alphaGalNAc- and

 $\label{lem:condition} \mbox{Galbeta1->3GalNAc-O-Ser/Thr also known as Tn and T antigens, LacdiNAc} \\$

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 CD4- positive 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

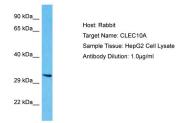
Tissue Location

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

References

Suzuki N., et al.J. Immunol. 156:128-135(1996). Ota T., et al. Nat. Genet. 36:40-45(2004).

Images



Host: Rabbit

Target Name: CLEC10A

Sample Tissue: HepG2 Whole cell lysate

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Antibody Dilution: 1.0µg/ml

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.