

Anti-CD1a Antibody
Catalog # ABO11182**Specification**

Anti-CD1a Antibody - Product Information

Application	WB
Primary Accession	P06126
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for T-cell surface glycoprotein CD1a(CD1A) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD1a Antibody - Additional Information

Gene ID 909

Other Names

T-cell surface glycoprotein CD1a, T-cell surface antigen T6/Leu-6, hTa1 thymocyte antigen, CD1a, CD1A

Calculated MW

37077 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cell membrane; Single-pass type I membrane protein. Endosome membrane. Subject to intracellular trafficking between the cell membrane and endosomes. Localizes to cell surface lipid rafts.

Tissue Specificity

Expressed on cortical thymocytes, epidermal Langerhans cells, dendritic cells, on certain T-cell leukemias, and in various other tissues. .

Protein Name

T-cell surface glycoprotein CD1a

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human CD1a(158-173aa

AKHFCKVLNQNQHEND).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-CD1a Antibody - Protein Information

Name CD1A

Function

Antigen-presenting protein that binds self and non-self lipid and glycolipid antigens and presents them to T-cell receptors on natural killer T-cells.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Membrane raft; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Note=Subject to intracellular trafficking between the cell membrane and endosomes (PubMed:11231314). Localizes to cell surface lipid rafts (PubMed:18178838).

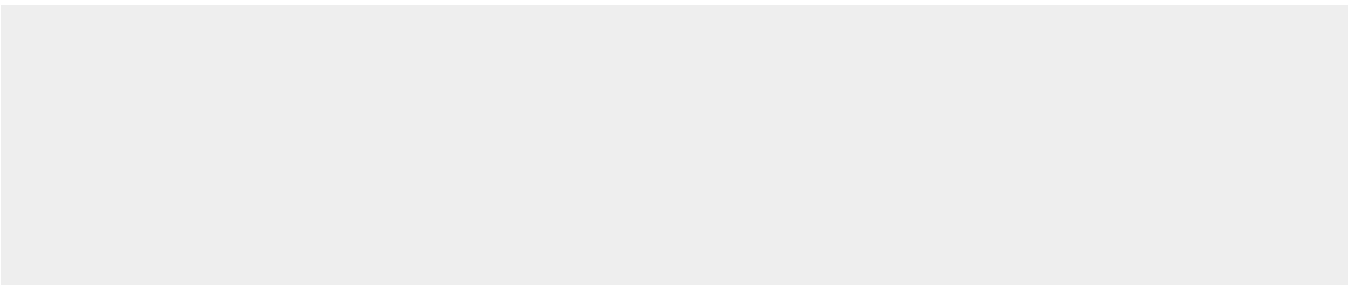
Tissue Location

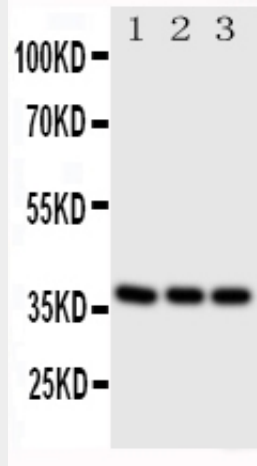
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Anti-CD1a Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CD1a Antibody - Images



Anti-CD1a antibody, ABO11182, Western blotting
All lanes: Anti CD1a (ABO11182) at 0.5ug/ml
Lane 1: JURKAT Whole Cell Lysate at 40ug
Lane 2: SW620 Whole Cell Lysate at 40ug
Lane 3: CEM Whole Cell Lysate at 40ug
Predicted bind size: 37KD
Observed bind size: 37KD

Anti-CD1a Antibody - Background

CD1A (Thymocyte antigen CD1A) also known as CD1, is a human protein encoded by the CD1A gene. CD1A is 1 of 5 distinct CD1 genes that are variably conserved in different mammalian species. This gene encodes a member of the CD1 family of transmembrane glycoproteins, which are structurally related to the major histocompatibility complex (MHC) proteins and form heterodimers with beta-2-microglobulin. The CD1A gene is mapped on 1q23.1. The CD1 proteins mediate the presentation of primarily lipid and glycolipid antigens of self or microbial origin to T cells. CD1A is concentrated in the early or recycling endosome. Moody et al. (2004) reported that CD1A presents to T cells a family of previously unknown lipopeptides from Mycobacterium tuberculosis, named didehydroxymycobactins because of their structural relation to mycobactin siderophores. The protein encoded by this gene localizes to the plasma membrane and to recycling vesicles of the early endocytic system. Apolipoprotein E (107741) binds lipid antigens and delivers them by receptor-mediated uptake into endosomal compartments containing CD1 in antigen-presenting cells.