

Anti-CD1d Antibody
Catalog # ABO11158

Specification

Anti-CD1d Antibody - Product Information

Application	WB, IHC
Primary Accession	P15813
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Antigen-presenting glycoprotein CD1d(CD1D) detection. Tested with WB, IHC-P in Human.

Reconstitution

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

Anti-CD1d Antibody - Additional Information

Gene ID 912

Other Names

Antigen-presenting glycoprotein CD1d, R3G1, CD1d, CD1D

Calculated MW

37717 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cell membrane; Single-pass type I membrane protein. Endosome membrane. Lysosome membrane. Subject to intracellular trafficking between the cell membrane, endosomes and lysosomes.

Tissue Specificity

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

Protein Name

Antigen-presenting glycoprotein CD1d

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 at the N-terminus of human CD1d(76-92aa FSDQQWETLQHIFRVYR).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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-CD1d Antibody - Protein Information

Name CD1D

Function

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

Cellular Location

Cell membrane; Single-pass type I membrane protein. Basolateral cell membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Note=Subject to intracellular trafficking between the cell membrane, endosomes and lysosomes.

Tissue Location

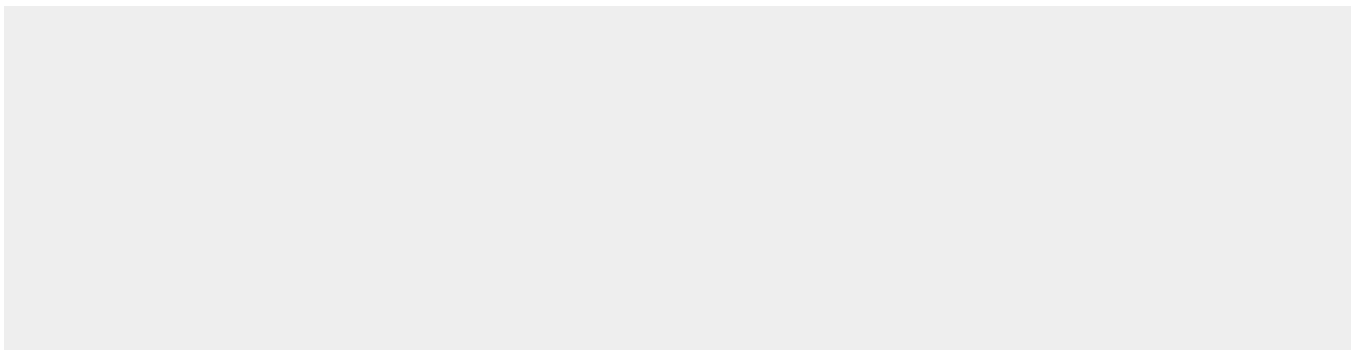
Expressed on cortical thymocytes, on certain T-cell leukemias, and in various other tissues

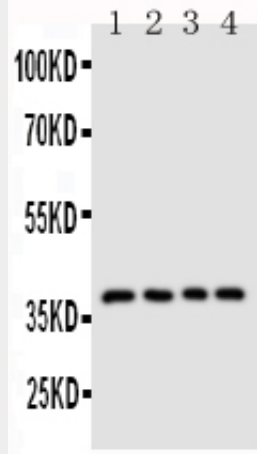
Anti-CD1d Antibody - Protocols

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

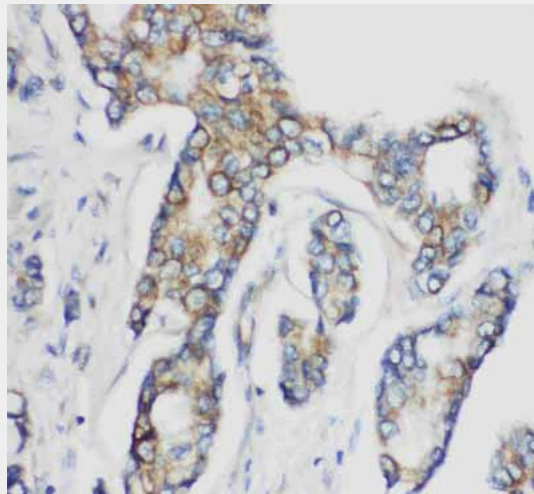
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CD1d Antibody - Images





Anti-CD1d antibody, ABO11158, Western blotting
 Lane 1: COLO320 Cell Lysate
 Lane 2: HELA Cell Lysate
 Lane 3: HT1080 Cell Lysate
 Lane 4: JURKAT Cell Lysate



Anti-CD1d antibody, ABO11158, IHC(P)
 IHC(P): Human Mammary Cancer Tissue

Anti-CD1d Antibody - Background

CD1D(CD1d molecule) also known as R3G1, Antigen-presenting glycoprotein CD1d, R3G1, CD1D, is the sole group-2 member of the CD1 family of major histocompatibility(MHC)-like glycoproteins. Expressed on the surface of various human antigen-presenting cells. They are related to the class I MHC molecules, and are involved in the presentation of lipid antigens to T cells. It is the only member of the group 2 CD1 molecules. CD1d presented lipid antigens activate a special class of T cells, known as Natural Killer T(NKT) cells. When activated, NKT cells rapidly produce Th1 and Th2 cytokines, typically represented by interferon-gamma and IL-4 production. Jayawardena-Wolf et al. described 2 different pathways of Cd1d trafficking to endosomal compartments in mouse cells. A tyrosine-based motif governs recycling between the plasma membrane and the endosome, while Cd1d associates, like major histocompatibility complex class II antigens, with the invariant chain, or II, in the endoplasmic reticulum. Both pathways enhance antigen presentation to Cd1d-restricted natural killer T cells.