

CD1e Antibody

Rabbit Polyclonal Antibody Catalog # ABV11446

Specification

CD1e Antibody - Product Information

Application WB, IF, ICC Primary Accession P15812

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 43626

CD1e Antibody - Additional Information

Gene ID 913

Positive Control WB: HeLa, SP20, H9C2 whole cell lysates,

IF/IC: HeLa cells

Application & Usage WB: 1:500 - 1:1000, IF/IC: 1:100 - 1:500

Other Names

T-cell surface glycoprotein CD1e membrane-associated; hCD1e; R2G1; CD1e

Target/Specificity

CD1e

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

1 mg/ml in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

CD1e Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



CD1e Antibody - Protein Information

Name CD1E

Function

T-cell surface glycoprotein CD1e, soluble binds diacetylated lipids, including phosphatidyl inositides and diacylated sulfoglycolipids, and is required for the presentation of glycolipid antigens on the cell surface. The membrane-associated form is not active.

Cellular Location

[T-cell surface glycoprotein CD1e, membrane- associated]: Golgi apparatus membrane; Single-pass type I membrane protein. Early endosome. Late endosome. Note=Predominantly localized in the trans-Golgi network in immature dendritic cells, and as a cleaved, soluble protein in the lysosome lumen of mature dendritic cells

Tissue Location

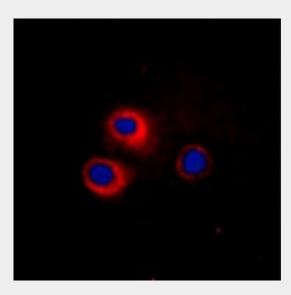
Expressed on cortical thymocytes, dendritic cells, Langerhans cells, on certain T-cell leukemias, and in various other tissues.

CD1e Antibody - Protocols

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

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

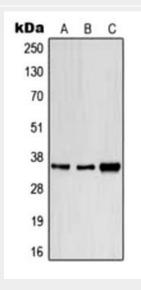
CD1e Antibody - Images



IF analysis of CD1e staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated



overnight at 4 $^{\circ}$ C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



Western blot analysis of CD1e expression in HeLa (A), SP20 (B), H9C2 (C) whole cell lysates.

CD1e Antibody - Background

CD1E 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 CD1 proteins mediate the presentation of primarily lipid and glycolipid antigens of self or microbial origin to T cells. The human genome contains five CD1 family genes organized in a cluster on chromosome 1. The CD1 family members are thought to differ in their cellular localization and specificity for particular lipid ligands. The protein encoded by this gene localizes within Golgi compartments, endosomes, and lysosomes, and is cleaved into a stable soluble form. The soluble form is required for the intracellular processing of some glycolipids into a form that can be presented by other CD1 family members.