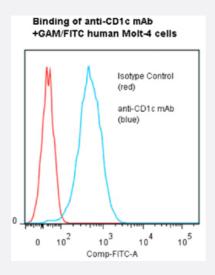


# CD1C monoclonal antibody, clone M241

Catalog # MAB6894 Size 100 ug

## **Applications**



### Flow Cytometry

Five x 105 cultured human Molt-4 cells per tube were incubated 45 minutes on ice with 80 uL anti-CD1c antibody at 10 ug/mL. Cells were washed twice and incubated with secondary reagent Goat anti-Mouse IgG/FITC, after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.45 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1 negative control at a similar concentration.

Specification	
Product Description	Mouse monoclonal antibody raised against native CD1C.
Immunogen	Native purified CD1C from human T cell line Molt 4.
Host	Mouse
Reactivity	Human
Specificity	This antibody recognizes the CD1c molecule of about 48 kd.
Form	Liquid
Purification	Protein A purification
Isotype	lgG1, kappa



### **Product Information**

Recommend Usage	Flow Cytometry Immunohistochemistry (Frozen sections) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM sodium phosphate buffer, 100 mM potassium chloride, 150 mM NaCl, pH 7.5 (0.5 mg/mL g entamicin sulfate).
Storage Instruction	Store at 4°C. Aliquot to avoid repeated freezing and thawing.

# **Applications**

- Immunohistochemistry (Frozen sections)
- Flow Cytometry

Five x  $10^5$  cultured human Molt-4 cells per tube were incubated 45 minutes on ice with 80 uL anti-CD1c antibody at 10 ug/mL. Cells were washed twice and incubated with secondary reagent Goat anti-Mouse lgG/FITC, after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.45  $\log_{10}$  fluorescent units when compared to a Mouse lgG1 negative control at a similar concentration.

Gene Info — CD1C	
Entrez GenelD	<u>911</u>
Gene Name	CD1C
Gene Alias	BDCA1, CD1, CD1A, R7
Gene Description	CD1c molecule
Omim ID	188340
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a member of the CD1 family of transmembrane glycoproteins, which are struc turally 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 ce llular localization and specificity for particular lipid ligands. The protein encoded by this gene is broadly distributed throughout the endocytic system via a tyrosine-based motif in the cytoplasmic tail. Alternatively spliced transcript variants of this gene have been observed, but their full-length nature is not known. [provided by RefSeq



#### **Product Information**

**Other Designations** 

CD1C antigen|CD1C antigen, c polypeptide|OTTHUMP00000018909|T-cell surface glycoprotein CD1c|cortical thymocyte antigen CD1C|differentiation antigen CD1-alpha-3

#### **Publication Reference**

 A pathway of costimulation that prevents anergy in CD28- T cells: B7-independent costimulation of CD1restricted T cells.

Behar SM, Porcelli SA, Beckman EM, Brenner MB.

The Journal of Experimental Medicine 1995 Dec; 182(6):2007.

Application: Func, Human, Human T cells

Structure and function of the CD1 family of MHC-like cell surface proteins.

Blumberg RS, Gerdes D, Chott A, Porcelli SA, Balk SP.

Immunological Reviews 1995 Oct; 147:5.

Application: Flow Cyt, IHC, Human, Mouse, Rabbit, B cells, Dendritic cells, Gastrointestinal tracts, Monocytes, T cells, Thymocytes

• Recognition of a lipid antigen by CD1-restricted alpha beta+ T cells.

Beckman EM, Porcelli SA, Morita CT, Behar SM, Furlong ST, Brenner MB.

Nature 1994 Dec; 372(6507):691.

## Pathway

Hematopoietic cell lineage

#### Disease

- Lung Diseases
- Mycobacterium Infections