

## Datasheet

### CD1A monoclonal antibody, clone HI149 (PE)

**Catalog Number:** MAB4378

**Regulatory Status:** For research use only (RUO)

**Product Description:** Mouse monoclonal antibody raised against native CD1A.

**Clone Name:** HI149

**Immunogen:** Native purified CD1A from human thymocytes.

**Host:** Mouse

**Reactivity:** Human

**Applications:** Flow Cyt, IHC-Fr  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Specificity:** This antibody reacts with CD1a (T6), a 49 KDa polypeptide associated with beta 2-microglobulin expressed on cortical thymocytes (strongly), Langerhans cells, dendritic cells and some T cell leukemias and lymphomas.  
This antibody does not react with peripheral blood T and B lymphocytes, monocytes, granulocytes, platelets and erythrocytes.

**Form:** Liquid

**Conjugation:** PE

**Isotype:** IgG1

**Recommend Usage:** Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10<sup>6</sup> cells in a suspension)  
The optimal working dilution should be determined by the end user.

**Storage Buffer:** In PBS (0.2% BSA, 0.09% sodium azide)

**Storage Instruction:** Store in the dark at 4 °C. Do not freeze.

Avoid prolonged exposure to light.

Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 909

**Gene Symbol:** CD1A

**Gene Alias:** CD1, FCB6, HTA1, R4, T6

**Gene Summary:** 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 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 to the plasma membrane and to recycling vesicles of the early endocytic system. Alternatively spliced transcript variants have been observed, but their biological validity has not been determined. [provided by RefSeq]

#### References:

1. CD1 antigen presentation by human dendritic cells as a target for herpes simplex virus immune evasion. Raftery MJ, Winau F, Kaufmann SH, Schaible UE, Schonrich G. J Immunol. 2006 Nov 1;177(9):6207-14.
2. Characterization of guinea-pig group 1 CD1 proteins. Hiromatsu K, Dascher CC, Sugita M, Gingrich-Baker C, Behar SM, LeClair KP, Brenner MB, Porcelli SA. Immunology. 2002 Jun;106(2):159-72.
3. Separate pathways for antigen presentation by CD1 molecules. Sugita M, Grant EP, van Donselaar E, Hsu VW, Rogers RA, Peters PJ, Brenner MB. Immunity. 1999 Dec;11(6):743-52.