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CD1b (T-Cell Surface Glycoprotein) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone 100-1A5]
Catalog # AH12589

Product Information

Application	IF, FC
Primary Accession	P29016
Other Accession	910, 1310
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgM, kappa
Clone Names	100-1A5
Calculated MW	36939

Additional Information

Gene ID	910
Other Names	T-cell surface glycoprotein CD1b, CD1b, CD1B
Application Note	IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD1b (T-Cell Surface Glycoprotein) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD1B
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. Endosome membrane; Single-pass type I membrane protein. Lysosome 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

Background

The mouse monoclonal antibody recognizes CD1b, a 44kDa type I glycoprotein associated with beta2-microglobulin (Workshop IV; Code T015). It is expressed on dendritic cells, Langerhans cells, thymocytes, and T acute lymphoblastic leukemia cells. The CD1 multigene family encodes five forms of the CD1 T-cell surface glycoprotein in human, designated CD1A, 1B, 1C, 1D and 1E. CD1, a type 1 membrane protein, has structural similarity to the MHC class I antigen and has been shown to present lipid antigens for recognition by T lymphocytes. Constitutive endocytosis of CD1B molecules and the differential sorting of MHC class II from lysosomes separate peptide- and lipid antigen-presenting molecules during dendritic cell maturation. CD1B is also expressed in interdigitating cells.

References

Knapp W. et al. (eds) Leukocyte Typing IV, p251-263, Oxford University Press, Oxford, 1989. | Battistini L, et al. CD1b is expressed in multiple sclerosis lesions. J Neuroimmunol 1996, 67(2):145-151. | Khalili-Shirazi A, et al. The distribution of CD1 molecules in inflammatory neuropathy. J Neurol Sci 1998,158(2):154-163. | Maher JK and Kronenberg M. The role of CD1 molecules in immune responses to infection. Curr Opin Immunol 1997, 9(4):456-461Blumberg RS et al. Structure and function of the CD1 family of MHC-like cell surface proteins. Immunol Rev 1995, 147:5-29. | Salamone MC et al. Analysis of CD1 molecules on haematological malignancies of myeloid and lymphoid origin. II. Intracellular detection of CD1 antigens. Dis Markers 1990, 8(5):275-281