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CD1a / HTA1 (Mature Langerhans Cells Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone CBT6]
Catalog # AH12587

Product Information

Application	IF, FC
Primary Accession	P06126
Other Accession	909, 1309
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	CBT6
Calculated MW	37077

Additional Information

Gene ID	909
Other Names	T-cell surface glycoprotein CD1a, T-cell surface antigen T6/Leu-6, hTa1 thymocyte antigen, CD1a, CD1A
Application Note	IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD1a / HTA1 (Mature Langerhans Cells Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD1A
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. Membrane raft; Single-pass type I membrane protein. Endosome membrane; Single- pass type I membrane protein. Note=Subject to intracellular trafficking between the cell membrane and endosomes (PubMed:11231314). Localizes to cell surface lipid rafts (PubMed:18178838).
Tissue Location	Expressed on cortical thymocytes, epidermal Langerhans cells, dendritic cells, on certain T-cell leukemias, and in various other tissues.

Background

At least five CD1 genes (CD1a, b, c, d, and e) are identified. CD1 proteins have been demonstrated to restrict T cell response to non-peptide lipid and glycolipid antigens and play a role in non-classical antigen presentation. CD1a is a non-polymorphic MHC Class 1 related cell surface glycoprotein, expressed in association with Beta-2 microglobulin. Anti-CD1a labels Langerhans cell histiocytosis (Histiocytosis X), extranodal histiocytic sarcoma, a subset of T-lymphoblastic lymphoma/leukemia, and interdigitating dendritic cell sarcoma of the lymph node. When combined with antibodies against TTF-1 and CD5, anti-CD1a is useful in distinguishing between pulmonary and thymic neoplasms since CD1a is consistently expressed in thymic lymphocytes in both typical and atypical thymomas, but only focally in 1/6 of thymic carcinomas and not in lymphocytes in pulmonary neoplasms. Anti-CD1a is reported to be a new marker for perivascular epithelial cell tumor (PEComa). □

References

van de Rijn M et al. J Immunol 1983, 131(2):851-5 | Lerch PG et al. Hum Immunol 1983, 6(1):13-30 | Knapp W. et al. (eds) Leukocyte Typing IV, p251-263, Oxford University Press, Oxford, 1989 | Khalili-Shirazi A, et al. J Neurol Sci 1998,158(2):154-163. | Maher JK and Kronenberg M.. Curr Opin Immunol 1997, 9(4):456-461 | Blumberg RS et al. Immunol Rev 1995, 147:5-29. | Salamone MC et al. Dis Markers 1990, 8(5):275-281

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.