

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

Mouse Monoclonal Antibody [Clone SPM120] Catalog # AH10832

### **Product Information**

ApplicationIF, FC, IHC-PPrimary AccessionP06126Other Accession909, 1309ReactivityHumanHostMouseClonalityMonoclonal

**Isotype** Mouse / IgG1, kappa

Clone Names SPM120 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 IHC-P~~N/A

**Format** 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G.

Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available

WITHOUT BSA & azide at 1.0mg/ml.

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** CD1a (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).

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

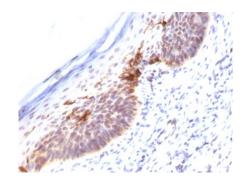
# **Background**

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. DWhen 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).  $\Box$ 

#### References

McNally, AK. et al. 2011. Exp. Mol. Pathol. 91: 673-681. | Matsuda, A. et al. 2009. Invest. Ophthalmol. Vis. Sci. 50: 2871-2877. | Gulubova, M. et al. 2008. Clin. Exp. Metastasis. 25: 777-785. | Cassaday, RD. et al. 2007. Clin. Cancer Res. 13: 540-549.

# **Images**



Formalin-fixed, paraffin-embedded human Skin stained with CD1a Monoclonal Antibody (SPM120).

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