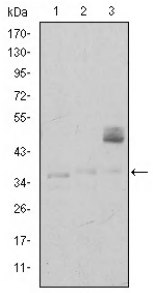
CD1A Monoclonal Antibody

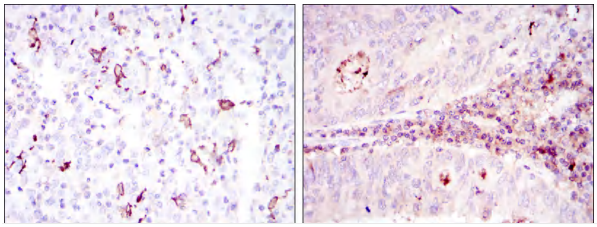
Catalog No	YP-Ab-13791
Isotype	IgG
Reactivity	Human
Applications	WB;IHC;IF;ELISA
Gene Name	CD1A
Protein Name	T-cell surface glycoprotein CD1a
Immunogen	Purified recombinant fragment of human CD1A expressed in E. Coli.
Specificity	CD1A Monoclonal Antibody detects endogenous levels of CD1A protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CD1A; T-cell surface glycoprotein CD1a; T-cell surface antigen T6/Leu-6; hTa1 thymocyte antigen; CD antigen CD1a
Observed Band	
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Membrane raft ; Single-pass type I membrane protein . Endosome membrane ; Single-pass type I membrane protein . Subject to intracellular trafficking between the cell membrane and endosomes (PubMed:11231314). Localizes to cell surface lipid rafts (PubMed:18178838). .
Tissue Specificity	Expressed on cortical thymocytes, epidermal Langerhans cells, dendritic cells, on certain T-cell leukemias, and in various other tissues.
Function	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.,miscellaneous:During protein synthesis and maturation, CD1 family members bind endogenous lipids that are replaced by lipid or glycolipid antigens when the proteins are internalized and pass through endosomes, before trafficking back to the cell surface.,similarity:Contains 1 Ig-like (immunoglobulin-like) domain.,subcellular location:Subject to intracellular trafficking between the cell membrane and endosomes. Localizes to cell surface lipid rafts.,subunit:Heterodimer with B2M (beta-2-microglobulin). Interacts with CD74.,tissue specificity:Expressed on cortical thymocytes, epidermal Langerhans cells, dendritic cells, on certain T-cell leukemias, and in various other tissues.,

Background	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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

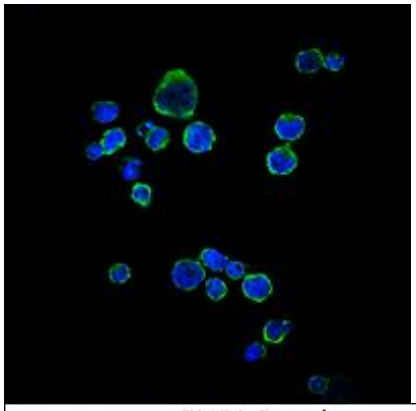
Products Images



Western Blot analysis using CD1A Monoclonal Antibody against K562 (1), RAJI (2), and MOLT4 (3) cell lysate.



Immunohistochemistry analysis of paraffin-embedded cervical cancer tissues (left) and colon cancer tissues (right) with DAB staining using CD1A Monoclonal Antibody.



Immunofluorescence analysis of RAJI cells using CD1A Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.