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CD1A Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant CD1A.
Catalog # AT1432a

Product Information

Application	WB, E
Primary Accession	P06126
Other Accession	BC031645
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b kappa
Clone Names	M1-2-1B5
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
Target/Specificity	CD1A (AAH31645, 1 a.a. ~ 311 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CD1A Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

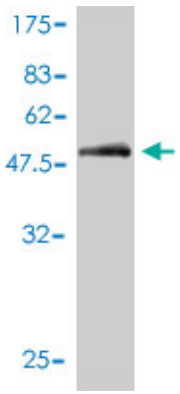
Background

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. Alternatively spliced transcript variants have been observed, but their biological validity has not been determined.

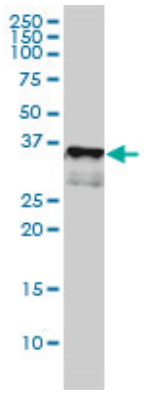
References

Primary deficiency of microsomal triglyceride transfer protein in human abetalipoproteinemia is associated with loss of CD1 function. Zeissig S, et al. J Clin Invest, 2010 Aug 2. PMID 20592474.New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.Early recycling compartment trafficking of CD1a is essential for its intersection and presentation of lipid antigens. Cernadas M, et al. J Immunol, 2010 Feb 1. PMID 20026739.Transient beta-catenin stabilization modifies lineage output from human thymic CD34+CD1a- progenitors. Valencia J, et al. J Leukoc Biol, 2010 Mar. PMID 19952356.Synthesis of dideoxymycobactin antigens presented by CD1a reveals T cell fine specificity for natural lipopeptide structures. Young DC, et al. J Biol Chem, 2009 Sep 11. PMID 19605355.

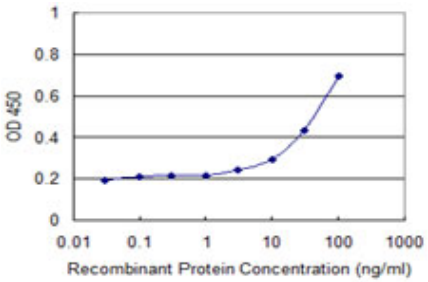
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (59.95 KDa) .



CD1A monoclonal antibody (M01), clone M1-2-1B5 Western Blot analysis of CD1A expression in K-562 ((Cat # AT1432a)



Detection limit for recombinant GST tagged CD1A is approximately 0.03ng/ml as a capture antibody.