SONY

Product Data Sheet

Biotin anti-mouse CD1d (CD1.1, Ly-38)

Catalog # / Size: 1217525 / 50 µg
1217530 / 500 µg

Clone: 1B1

Isotype: Rat IgG2b, κ

Immunogen: Mouse Cd1.1 cDNA-transfected RMA-S mouse T lymphoma

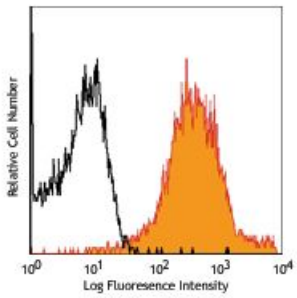
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: V-CD28.05

Concentration: 0.5



C57BL/6 mouse splenocytes stained with biotinylated 1B1, followed by Sav-PE

Applications:

Applications: Flow Cytometry, Immunohistochemistry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation, immunohistochemistical staining, and blocking function3.

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Application References:

1. Fischer K, *et al.* 2004. *P. Natl. Acad. Sci. USA* 101:10685. (Block)
2. Brozovic S, *et al.* 2004. *Nat. Med.* 10:535.
3. Brossay L, *et al.* 1997. *J. Immunol.*. 159:1216. (Block)
4. Jiang J, *et al.* 2012. *PLoS One.* 7:47487. PubMed

Description: CD1d, known as CD1.1 and Ly-38, is a 48 kD type I membrane glycoprotein with structural similarities to MHC class I and is non-covalently associated with β2-microglobulin. In humans, CD1 family consists of group I proteins (CD1a, CD1b, and CD1c), group II (CD1d), and group III (CD1e). But CD1d is the only CD1 molecule has been found in mouse. Mouse CD1d has broad tissue distribution, and is found on leukocytes, dendritic cells, epithelial cells, and thymocytes. CD1d plays a role in non-peptide glycolipid antigen presentation to CD1d-restricted T cells. It has been shown that PKCδ is a critical regulator of CD1d-mediated antigen presentation.

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Antigen References:

1. Brudin N, *et al.* 1998. *J. Immunol.* 161:3271.
2. Amano M, *et al.* 1998. *J. Immunol.* 161:1710.
3. Brossay L, *et al.* 1997. *J. Immunol.* 159:1216.
4. Dougan SK, *et al.* 2007. *Curr. Top. Microbiol. Immunol.* 314:113.
5. Brutkiewicz RR, *et al.* 2007. *Eur. J. Immunol.* 37:2390.

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