

APC/Fire™ 750 anti-mouse CD1d (CD1.1, Ly-38)

Catalog # / Size: 1217630 / 100 µg
1217625 / 25 µg

Clone: 1B1

Isotype: Rat IgG2b, κ

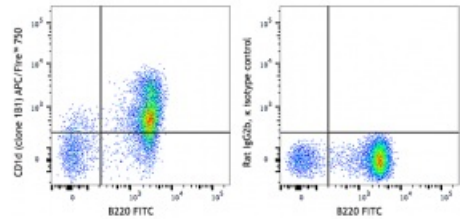
Immunogen: Mouse Cd1.1 cDNA-transfected RMA-S mouse T lymphoma

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

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

Concentration: 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with B220 FITC and CD1d APC/Fire™ 750 (clone 1B1, left) or Rat IgG2b, κ isotype control APC/Fire™ 750 (right).

Applications:

Applications: Flow Cytometry

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.

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation, immunohistochemical 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](https://pubmed.ncbi.nlm.nih.gov/22811111/)

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 β 2-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 PKC δ is a critical regulator of CD1d-mediated antigen presentation.

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.