## **Product Data Sheet**

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

**Catalog** # /  $1217625 / 25 \mu g$ 

**Size:**  $1217630 / 100 \mu g$ 

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

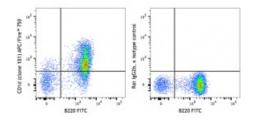
conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Workshop Number: 750 under optimal conditions.

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

analysis. For flow cytometric staining, the suggested use of this reagent is  $\leq 0.25 \, \mu g$  per million cells in  $100 \, \mu l$  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:

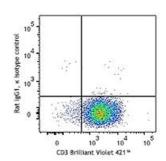
Additional reported applications (for the relevant formats) include:

immunoprecipitation,

immunohistochemistical staining,

and blocking function<sup>3</sup>.

This product is for research use only and is not to be used for commercial purposes. Use of this product to produce products for sale or for diagnostic, therapeutic or drug discovery purposes is prohibited. In order to obtain a license to use this product for commercial purposes, contact the Regents of the University of California.



C57BL/6 mouse bone marrow cells were stained with CD150 (SLAM) (clone TC15-12F12.2) APC/Fire™ 750 (filled histogram) or rat IgG2a, κ APC/Fire™ 750 isotype control (open histogram).

# 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  $\beta 2$ -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 $\delta$  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.