Product Data Sheet

Pacific Blue™ anti-mouse CD1d (CD1.1, Ly-38)

Catalog # / Size: 1217585 / 100 μg

1217580 / 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

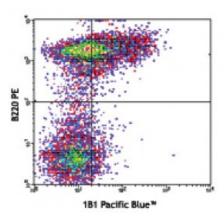
chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated

Pacific Blue™.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



C57/B6 mouse splenocytes were stained with CD1d (clone 1B1)
Pacific Blue™ (top) or rat IgG2b, κ
Pacific Blue™ isotype control (bottom).

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 ≤1.0 microg per million cells in 100 microL volume or 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for

each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the

Application Notes:

Additional reported applications (for the

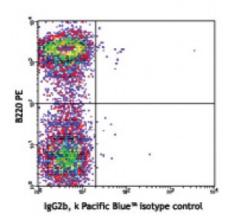
relevant formats) include: immunoprecipitation,

immunohistochemistical staining, and

blocking function3.

fluorochrome.

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purposes, contact the Regents of the University of California.

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)

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 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.