

Product Information

Contents: Affinity Purified anti-mouse CD1d (CD1.1, Ly-38)

Catalog Number: 14-0011

Sizes: 50 ug, 100 ug, 500 ug

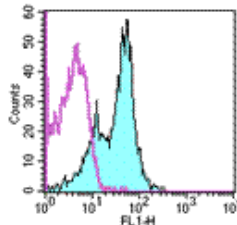
Formulation: Phosphate buffer pH 7.2,
150 mM NaCl, 0.09% NaN₃

Storage Conditions: Store at 4°C.

Avoid repeated freeze/thaw cycles.

Clone: 1B1

Isotype: Rat IgG2b, κ



Staining of BALB/c splenocytes with 1.0 µg of purified rat IgG2b isotype control (cat. 14-4331) (open histogram) or 1.0 µg of purified anti-mouse CD1d (1B1) (colored histogram) followed by FITC anti-rat IgG (cat. 11-4811). Total viable cells were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
11-0011	FITC anti-mouse CD1d (CD1.1, Ly-38)	488	518	FC
12-0011	PE anti-mouse CD1d (CD1.1, Ly-38)	488	575	FC
13-0011	Biotin anti-mouse CD1d (CD1.1, Ly-38)	N/A	N/A	FC
14-0011	Affinity Purified anti-mouse CD1d (CD1.1, Ly-38)	N/A	N/A	FA FC IHC IP
16-0011	Functional Grade* Purified anti-mouse CD1d (CD1.1, Ly-38)	N/A	N/A	FA FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/µg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

Description

The 1B1 monoclonal antibody reacts with mouse CD1d, a 48 kDa glycoprotein with structural homology to MHC class I molecules. While similar to MHC Class I, CD1d associates with β2-m, functionally CD1d is similar to MHC Class II. 1B1 detects CD1d at varying levels on mouse leukocytes. 1B1 detects β2-m associated CD1d.

Usage

For research use only, not for diagnostic or therapeutic use. The 1B1 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining. 1B1 has also been reported in *in vivo* and *in vitro* studies. (Please use Functional Grade purified 1B1, cat. 16-0011, in functional assays.)

Applications Tested

The 1B1 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 1 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 11-0011	FITC anti-mouse CD1d (CD1.1, Ly-38) (clone 1B1)
Cat. 12-0011	PE anti-mouse CD1d (CD1.1, Ly-38) (clone 1B1)
Cat. 13-0011	Biotin anti-mouse CD1d (CD1.1, Ly-38) (clone 1B1)
Cat. 16-0011	Functional Grade Purified anti-mouse CD1d (CD1.1, Ly-38) (clone 1B1)
Cat. 14-4031	Purified Rat IgG2b Isotype Control (clone eB149/10H5)
Cat. 11-4317	Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317	Streptavidin-PE (Phycoerythrin)

Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
Cat. 11-4811 FITC Anti-Rat IgG
Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)

References

- Brossay L, D.Jullien, S. Cardell, B.C. Sydora, N. Burdin, R.L. Modlin, and M. Kronenberg. 1997. Mouse CD1 is mainly expressed on hemopoietic derived cells. *J. Immunol.* 159: 1216-1224.
- Amano M., N. Baumgarth, M.D. Dick, L. Brossay, M. Kronenberg, L.A. Herzenberg, and S Strober. 1998. CD1 expression defines subsets of follicular and marginal zone B cells in the spleen: β 2-microglobulin-dependent and independent forms. *J. Immunol.* 161:1710-1717.
- Sydora B.C., L. Brossay, A. Hagenbaugh, M. Kronenberg, and H. Cheroutre. 1996. TAP-independent selection of CD8+ intestinal intraepithelial lymphocytes. *J. Immunol.* 156: 4209-4216.
- Roark J.H., S.-H. Park, J. Jayawardena, U. Kavita, M. Shannon, and A. Bendelac. 1998. CD1.1 expression by mouse antigen-presenting cells and marginal zone B cells. *J. Immunol.* 160: 3121-3127.
- Kawano, T. J. Cui, Y. Koezuka, I. Toura, Y. Kaneko, K. Motoki, H. Ueno, R. Nakagawa, H. Sato, E. Kondo, H. Koseki, and M. Taniguchi. 1997. CD1d-restricted and TCR-mediated activation of Valpha14 NKT cells by glycosylceramides. *Science* 278:1626-1629.
- Brudin N., L. Brossay, Y. Koezuka, S. T. Smiley, M. J. Grusby, M. Gui, M. Taniguchi, K. Hayakawa, M. Kronenberg. 1998. Selective Ability of Mouse CD1 to Present Glycolipids: α -Galactosylceramide Specifically Stimulates Va14+ NK T Lymphocytes. *J. Immunol* 161: 271-81.