

Anti-Mouse CD1d PE

Catalog Number: 12-0011 Also Known As:CD1.1, Ly-38 RUO: For Research Use Only

Product Information

Contents: Anti-Mouse CD1d PE Catalog Number: 12-0011

Clone: 1B1

Concentration: 0.2 mg/ml Host/Isotype: Rat IgG2b, κ Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light

sensitive material.

Batch Code: Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

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 β 2-m, functionally CD1d is similar to MHC Class II. 1B1 detects CD1d at varying levels on mouse leukocytes. 1B1 detects β 2-m associated CD1d.

Applications Reported

The 1B1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

The 1B1 antibody has been tested by flow cytometeric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 0.125 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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: β2-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 Vα14+ NK T Lymphocytes. J. Immunol 161: 271-81.

Szalay G, Ladel CH, Blum C, Brossay L, Kronenberg M, Kaufmann SH. Cutting edge: anti-CD1 monoclonal antibody treatment reverses the production patterns of TGF-beta 2 and Th1 cytokines and ameliorates listeriosis in mice. J Immunol. 1999 Jun 15;162(12):6955-8. (in vivo, PubMed)

Related Products

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