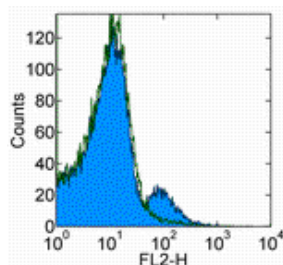


Anti-Human CD1d Purified

Catalog Number: 14-0016

Also Known As: R3, R3G1

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with 0.5 ug of Mouse IgG2b K Isotype Control Purified (cat. 14-4732) (open histogram) or Anti-Human CD1d Purified (filled histogram) followed by Anti-Mouse IgG Biotin (cat. 13-4013) and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD1d Purified

REF **Catalog Number:** 14-0016

Clone: 51.1

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial

Description

The monoclonal antibody 51.1 reacts with human CD1d, a member of the CD1 family with similarity to the non-polymorphic MHC Class I-like molecules. CD1d is a highly conserved single transmembrane receptor of the Immunoglobulin Superfamily. CD1d can associate with beta-microglobulin another feature showing similarity to MHC class I molecules, but can also exist as a nonglycosylated protein not in association with beta microglobulin. This suggests different control mechanisms for presenting glycolipid containing molecules to CD1d reactive NKT cells. Expression of CD1d is found on B cells of the periphery, in resting monocytes and cortical thymocytes. On intestinal epithelial cells (IEC) expression is polarized. Expression can also be found at low levels intracellularly in hepatocytes. In HCV (hepatitis C virus) livers, CD1d is highly expressed compared to normal controls.

Applications Reported

This 51.1 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistology staining of frozen tissue sections.

Applications Tested

This 51.1 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. 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

Durante-Mangoni E, Wang R, Shaulov A, He Q, Nasser I, Afdhal N, Koziel MJ, Exley MA. Hepatic CD1d expression in hepatitis C virus infection and recognition by resident proinflammatory CD1d-reactive T cells. *J Immunol.* 2004 Aug 1;173(3):2159-66. (51.1 IHf)

Exley M, Garcia J, Wilson SB, Spada F, Gerdes D, Tahir SM, Patton KT, Blumberg RS, Porcelli S, Chott A, Balk SP. CD1d structure and regulation on human thymocytes, peripheral blood T cells, B cells and monocytes. *Immunology.* 2000 May;100(1):37-47.

Somnay-Wadgaonkar K, Nusrat A, Kim HS, Canchis WP, Balk SP, Colgan SP, Blumberg RS. Immunolocalization of CD1d in human intestinal epithelial cells and identification of a beta2-microglobulin-associated form. *Int Immunol.* 1999 Mar;11(3):383-92.

Blumberg RS, Terhorst C, Bleicher P, McDermott FV, Allan CH, Landau SB, Trier JS, Balk SP. Expression of a nonpolymorphic MHC class I-like molecule, CD1D, by human intestinal epithelial cells. *J Immunol.* 1991 Oct 15;147(8):2518-24.

Related Products

11-4011 Anti-Mouse IgG FITC

12-4317 Streptavidin PE

13-4013 Anti-Mouse IgG Biotin (Polyclonal)
14-4732 Mouse IgG2b K Isotype Control Purified

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com