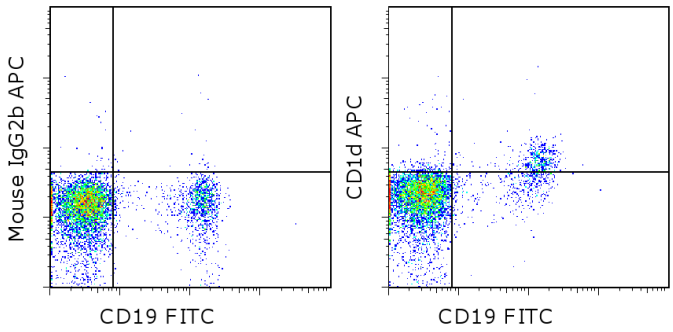
Anti-Human CD1d APC

Catalog Number: 17-0016
Also known as: R3, R3G1
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Anti-Human CD19 FITC (cat. 11-0199) and Mouse IgG2b K Isotype Control APC (cat. 17-4732) (left) or Anti-Human CD1d APC (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD1d APC
REF **Catalog Number:** 17-0016
Clone: 51.1
Concentration: 5 uL (0.125 ug)/test
Host/Isotype: Mouse IgG2b, kappa

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.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial
Contains sodium azide

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.

Applications Tested

This 51.1 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.125 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 10^5 to 10^8 cells/test.

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.

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

Anti-Human CD1d APC

Catalog Number: 17-0016
Also known as: R3, R3G1
RUO: For Research Use Only. Not for use in diagnostic procedures.

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
00-4222 Flow Cytometry Staining Buffer
11-0199 Anti-Human CD19 FITC (HIB19)
17-4732 Mouse IgG2b K Isotype Control APC

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