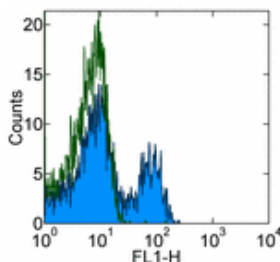


Anti-Human CD244 Purified

Catalog Number: 14-5838

Also Known As: 2B4, p38, SLAMF4

RUO: For Research Use Only



Staining of normal human peripheral blood cells with 0.25 µg of Mouse IgG1 κ Isotype Control Purified (cat. 14-4714) (open histogram) or 0.25 µg of Anti-Human CD244 Purified (filled histogram) followed by Anti-Mouse IgG FITC (cat. 11-4011). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD244 Purified

 Catalog Number: 14-5838

Clone: eBioC1.7 (C1.7)

Concentration: 0.5 mg/ml

Host/Isotype: Mouse IgG1, κ

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



Caution, contains Azide

Description

The eBioC1.7 monoclonal antibody reacts with human CD244 (2B4, p38). In human, CD244 is a 38 kDa protein expressed on NK cells, a subset of CD8+ T cells, γδ T cells, monocytes, basophils and eosinophils. Binding of the CD244 ligand, CD48, results in NK cell activation, unlike mouse CD244, which is an inhibitory receptor. For CD244 expressed on NK cells, binding of CD48 results in enhanced NK cell cytotoxicity and secretion of IFN-γ. Recently, it was demonstrated that binding of the C1.7 monoclonal antibody and CD48 involve the same residue in the V domain of human CD244, which explains the ability of C1.7 binding to induce activation of NK cells. Binding of C1.7 to CD244 leads to tyrosine phosphorylation and recruitment of the adaptor molecule SAP (SLAM-associated protein). Patients with X-linked lymphoproliferative disorder (XLPD) have a mutation in SAP which renders it unable to bind to phosphorylated CD244.

Applications Reported

This eBioC1.7 (C1.7) antibody has been reported for use in flow cytometric analysis.

Applications Tested

This eBioC1.7 (C1.7) antibody has been tested by flow cytometric analysis of normal human peripheral blood. 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

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Chuang SS, Kim MH, Johnson LA, Albertsson P, Kitson RP, Nannmark U, Goldfarb RH, Mathew PA. 2B4 stimulation of YT cells induces natural killer cell cytolytic function and invasiveness. *Immunology.* 2000 Jul;100(3):378-83. (C1.7, FC, FA, PubMed)

Mathew SO, Kumaresan PR, Lee JK, Huynh VT, Mathew PA. Mutational analysis of the human 2B4 (CD244)/CD48 interaction: Lys68 and Glu70 in the V domain of 2B4 are critical for CD48 binding and functional activation of NK cells. *J Immunol.* 2005 Jul 15;175(2):1005-13. (C1.7, FC, PubMed)

van Emmerik NE, Knoop CJ, Vaessen LM, Balk AH, Mochtar B, Claas FH, Weimar W. C1.7 monoclonal antibody designates high-avidity CD4+ cytotoxic T lymphocytes involved in clinical heart rejection. *Transplantation.* 1998 Jul 15;66(1):135-8. (C1.7, FC, PubMed)

Related Products

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC
11-5837 Anti-Human CD244 FITC (eBioDM244)
12-4317 Streptavidin PE
13-4013 Anti-Mouse IgG Biotin (Polyclonal)
14-4714 Mouse IgG1 K Isotype Control Purified
17-4317 Streptavidin APC
51-5837 Anti-Human CD244 Alexa Fluor® 647 (To Be Discontinued. Refer to Alternative Format: APC, cat. 17-5837) (eBioDM244)

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