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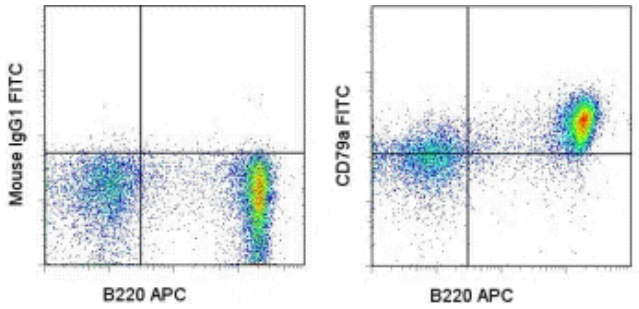
Anti-Mouse CD79a FITC

Catalog Number: 11-0791
Also Known As:Ig-alpha, mb-1, Ly-54
RUO: For Research Use Only. Not for use in diagnostic procedures.



Intracellular staining of C57BL/6 splenocytes with Anti-Human/Mouse CD45R (B220) APC (cat. 17-0452) and 0.25 ug of Mouse IgG1 K Isotype Control FITC (cat. 11-4714) (left) or 0.5 ug of Anti-Mouse CD79a FITC (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD79a FITC
REF Catalog Number: 11-0791
Clone: 24C2.5
Concentration: 0.5 mg/mL
Host/Isotype: Mouse IgG1, 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

This 24C2.5 monoclonal antibody reacts with the intracellular tail of mouse CD79a (also known as Ig alpha or mb-1), a signaling component of the B cell receptor (BCR). CD79a heterodimerizes with CD79b (Ig beta, B29), and together with surface Ig, make up the BCR. Both CD79 subunits consist of a single extracellular Ig domain, a transmembrane domain, and an intracellular signaling domain. CD79a is expressed almost exclusively on B cells, as well as in most B lineage acute lymphoblastic leukemias. The cytoplasmic domain of CD79a contains immunoreceptor tyrosine-based activation motifs (ITAMs), which constitute the signal transducing portions of the BCR. Tyrosine phosphorylation of these ITAMs by Syk and Lyn initiates numerous signaling cascades, resulting in B cell activation, proliferation, and differentiation.

Applications Reported

This 24C2.5 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This 24C2.5 antibody has been tested by flow cytometric analysis on mouse splenocytes. This can be used at less than or equal to 1 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Patterson HC, Kraus M, Kim YM, Ploegh H, Rajewsky K. The B cell receptor promotes B cell activation and proliferation through a non-ITAM tyrosine in the Igalpha cytoplasmic domain. Immunity. 2006 Jul;25(1):55-65.

Pike KA, Iacampo S, Friedmann JE, Ratcliffe MJ. The cytoplasmic domain of Ig alpha is necessary and sufficient to support efficient early B cell development. J Immunol. 2004 Feb 15;172(4):2210-8.

Melenz D, Ruschel A, Vettermann C, Jäck HM. Immunoglobulin mu heavy chains do not mediate tyrosine phosphorylation of Ig alpha from the ER-cis-Golgi. J Immunol. 2003 ;171(6):3091-101. (24C2.5, FC, WB, Pubmed)

Astsaturov IA, Matutes E, Morilla R, Seon BK, Mason DY, Farahat N, Catovsky D. Differential expression of B29 (CD79b) and mb-1 (CD79a) proteins in acute lymphoblastic leukaemia. Leukemia. 1996 May;10(5):769-73.

Related Products

11-4714 Mouse IgG1 K Isotype Control FITC (P3.6.2.1)
17-0452 Anti-Human/Mouse CD45R (B220) APC (RA3-6B2)

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