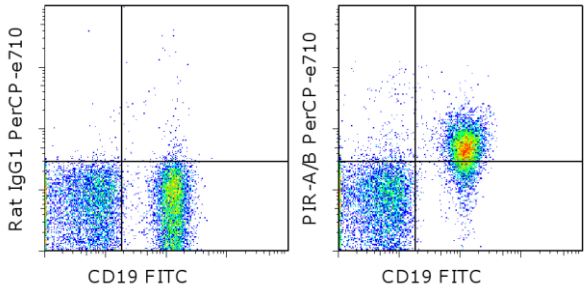
Anti-Mouse PIR-A/B PerCP-eFluor® 710

Catalog Number: 46-5978
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of BALB/c splenocytes with Anti-Mouse CD19 FITC (cat. 11-0193) and 0.5 ug of Rat IgG1 kappa Isotype Control PerCP-eFluor® 710 (cat. 46-4301) (left) or 0.5 ug of Anti-Mouse PIR-A/B PerCP-eFluor® 710 (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse PIR-A/B PerCP-eFluor® 710
REF **Catalog Number:** 46-5978
Clone: 6C1
Concentration: 0.2 mg/mL
Host/Isotype: Rat 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

Description

This 6C1 monoclonal antibody reacts with mouse paired Ig-like receptors of activating (PIR)-A and -B. These cell surface glycoproteins, which contain six Ig-like domains yet distinct transmembrane and cytoplasmic regions, are expressed together on B lymphocytes, dendritic cells, macrophages, granulocytes, platelets, and mast cells. T cells, NK cells, and erythrocytes do not express these receptors. The PIR-A receptor interacts with signaling molecules containing immunoreceptor tyrosine-based activation motifs (ITAMs) which lead to its activating function. In contrast, the PIR-B receptor associates with proteins possessing immunoreceptor tyrosine-based inhibitory motifs (ITIMs); therefore, this receptor has been shown to have an inhibitory function. PIRs bind MHC class I to modulate cell signaling and homeostasis of the immune system. Moreover, PIR-B knockout mice have been shown to exhibit susceptibility to Salmonella infection.

Crossblocking studies indicate that 6C1 recognizes a different epitope from 10-1-PIR (cat. no. 17-3101).

Applications Reported

This 6C1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 6C1 antibody has been tested by flow cytometric analysis of 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.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

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Click here or contact eBioscience Technical Support for more information on eFluor™ Organic Dyes including PerCP-eFluor® 710.

References

Torii I, Oka S, Hotomi M, Benjamin WH Jr, Takai T, Kearney JF, Briles DE, Kubagawa H. PIR-B-deficient mice are susceptible to Salmonella infection. J Immunol. 2008 Sep 15;181(6):4229-39.

Takai T. A novel recognition system for MHC class I molecules constituted by PIR. Adv Immunol. 2005;88:161-92.

Uehara T, Bléry M, Kang DW, Chen CC, Ho LH, Gartland GL, Liu FT, Vivier E, Cooper MD, Kubagawa H.Inhibition of IgE-mediated mast cell activation by the paired Ig-like receptor PIR-B. J Clin Invest. 2001 Oct;108(7):1041-50. (**6C1**,FC, IP, WB)

Kubagawa H, Chen CC, Ho LH, Shimada TS, Gartland L, Mashburn C, Uehara T, Ravetch JV, Cooper MD. Biochemical nature and cellular distribution of the paired immunoglobulin-like receptors, PIR-A and PIR-B. J Exp Med. 1999 Jan 18;189(2):309-18. (**6C1**,FC, IP, WB)

Related Products

11-0193 Anti-Mouse CD19 FITC (eBio1D3 (1D3))
46-4301 Rat IgG1 K Isotype Control PerCP-eFluor® 710

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