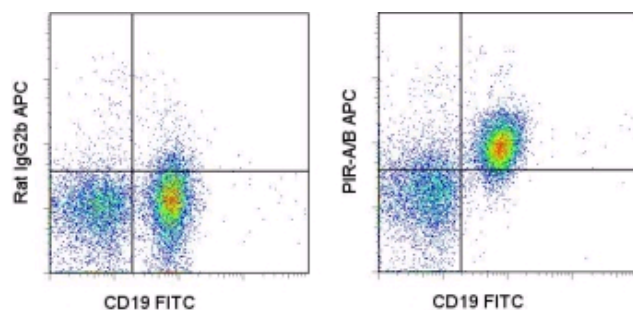


Anti-Mouse PIR-A/B APC

Catalog Number: 17-3101

Also Known As: PirA, PirB, PIR A, PIR-A, PIR B, PIR-B, PIR AB, PIR-AB, PIRAB

RUO: For Research Use Only



Staining of C57BL/6 splenocytes with Anti-Mouse CD19 FITC (cat. 11-0193) and 0.125 µg of Rat IgG2b κ Isotype Control APC (cat. 17-4031) (left) or 0.125 µg of Anti-Mouse PIR-A/B APC (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse PIR-A/B APC


REF Catalog Number: 17-3101

Clone: 10-1-PIR


Concentration: 0.2 mg/ml

Host/Isotype: Rat IgG2b, κ

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 10-1-PIR monoclonal antibody reacts with mouse paired Ig-like receptors of activating (PIR)-A and -B. These cell surface glycoproteins, which contain six extracellular Ig-like domains with distinct transmembrane and cytoplasmic regions, are expressed together on B lymphocytes, dendritic cells, macrophages, granulocytes, platelets, and mast cells. However, expression of PIR-A/B has not been observed on T cells, NK cells, and erythrocytes. 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 10-1-PIR recognizes a different epitope from 6C1 (cat. no. 46-5978).

Applications Reported

This 10-1-PIR antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 10-1-PIR antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 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

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.

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.

Related Products

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