Human FCRL3/FcRH3 PE-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 546828

Catalog Number: FAB3126P

100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FCRL3/FcRH3 in direct ELISAs. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) FCRL2 and rhFCRL5 is observed, and no cross-reactivity with rhFCRL1 or recombinant mouse FCRL3 is observed.
Source	Monoclonal Mouse IgG_1 Clone # 546828
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human FCRL3/FcRH3 Arg14-Arg569 Accession # Q96P31
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

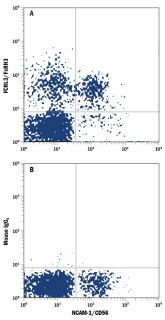
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of FCRL3/FcRH3 in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human NCAM-1/CD56 APC-conjugated Monoclonal Antibody (Catalog # FAB2408A) and either (A) Mouse Anti-Human FCRL3/FcRH3 PE-conjugated Monoclonal Antibody (Catalog # FAB3126P) or (B) Mouse IgG_1 Phycoerythrin Isotype Control (Catalog # IC002P). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** • 12 months from date of receipt, 2 to 8 °C as supplied.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956

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BACKGROUND

FCRL3 (Fc Receptor-Like 3), also known as FcRH3, IRTA3, and SPAP2, is a 110 kDa molecule with sequence homology to classical Fc receptors. The type 1 transmembrane FCRL proteins contain from three to nine immunoglobulin-like domains. They are differentially expressed within the B cell lineage and can either promote or inhibit B cell proliferation and activation (1). Mature human FCRL3 consists of a 556 amino acid (aa) Extracellular Domain (ECD) with six Ig-like domains, a 21 aa transmembrane segment, and a 140 aa cytoplasmic domain with four Immunotyrosine Inhibitory Motifs (ITIMs) (2-4). Within the ECD, human and mouse FCRL3 share 35% aa sequence identity. Alternate splicing generates several additional isoforms with deletions or substitutions in both the extracellular and intracellular regions. These include potentially secreted forms that are truncated following the second Ig-like domain (4). FCRL3 is expressed in secondary lymphoid organs on the surface of mature naïve and memory B cells, NK cells, and B cell lines derived from chronic lymphocytic leukemias (2, 3, 5). It is upregulated on B cells following LPS or anti-CD40 stimulation (6). A polymorphism in the FCRL3 promoter induces enhanced transcription and is associated with the development of autoimmune disorders in a Japanese population (6, 7). Tyrosine phosphorylation within the ITIMs of FCRL3 enables its association with SHP-1 (4).

References:

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6. Kochi, Y. *et al.* (2005) Nat. Genet. **37**:478.
7. Chistiakov, D.A. and A.P. Chistiakov (2007) Hum. Immunol. **68**:375.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956