Mouse FCRLA Antibody

Monoclonal Rat IgG_{2A} Clone # 865910

Catalog Number: MAB7905

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse FCRLA in ELISA.
Source	Monoclonal Rat IgG_{2A} Clone # 865910
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse FCRLA Lys221-Lys352 Accession # Q920A9
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

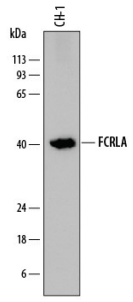
APPLICATIONS

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
Western Blot	2 µg/mL	See Below
Flow Cytometry	2.5 µg/10^6 cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

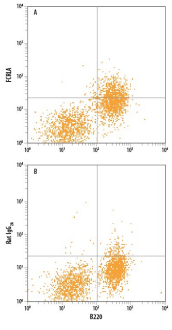
DATA

Western Blot



Detection of Mouse FCRLA by Western Blot. Western blot shows lysates of CH-1 mouse B cell lymphoma cell line. PVDF membrane was probed with 2 µg/mL of Rat Anti-Mouse FCRLA Monoclonal Antibody (Catalog # MAB7905) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for FCRLA at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Flow Cytometry



Detection of FCRLA in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stained with Rat Anti-Mouse B220/CD45R PE-conjugated Monoclonal Antibody (Catalog # FAB1217P) and either (A) Rat Anti-Mouse FCRLA Monoclonal Antibody (Catalog # MAB7905) or (B) Rat IgG_{2A} Isotype Control (Catalog # MAB006) followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

FCRLA (Fc Receptor-Like A; also known as FcRX and Fc receptor Homolog Expressed in B cells) is a 44 kDa intracellular member of the FcγRI class, FcR family, Immunoglobulin Superfamily of molecules. It is associated with B lineage cells, and has been identified in virtually all splenic B cells, peritoneal B1b and B2 B cells, and immature through mature bone marrow B cells. Not all cells show equal expression patterns. In the spleen, weak FCRLA expression occurs in naïve follicular and marginal zone B cells, and increases with activation state. FcRLA is suggested to act as an ER chaperone during antibody maturation, and is known to bind to IgM, IgA, and IgG prior to their secretion. Mouse FCRLA is synthesized as a 34 kDa, 322 amino acid (aa) precursor that contains a 30 aa signal sequence, two C2-type Ig-like domains (aa 80-169 and 182-26), and a C-terminal poly-Proline region (aa 289-294). Although there is no traditional ER retention signal, a viable substitute is assumed to exist at the N-terminus of the mature molecule. FCRLA is believed to exist naturally as a monomer; however, disulfide-linkage can occur during experimental manipulation. While four potential isoform variants are reported, it is unclear if any are actually expressed. One shows an Ala insertion after Ala28, a second shows an AlaIle substitution for aa 20-22, a third contains that previous AlaIle substitution coupled to a deletion of aa 90-115, while a fourth utilizes an alternative start site at Met62. Over aa 221-352, mouse FCRLA shares 68% and 55% aa sequence identity with rat and human FCRLA, respectively.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449