

## DESCRIPTION

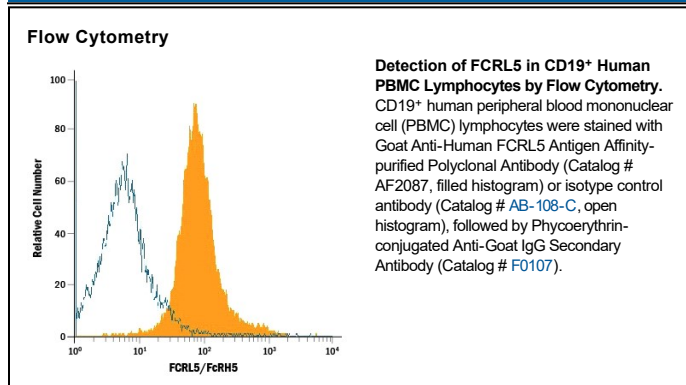
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human FCRL5/FcRH5 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human (rh) IRTA3, rhIRTA4, and rhIRTA5 is observed and less than 5% cross-reactivity with rhIRTA1 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human FCRL5/FcRH5 Gln16-Arg844 Accession # AAK93971
<b>Formulation</b>	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
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human FCRL5/FcRH5 (Catalog # 2078-FC)
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Fc Receptor-Like 5 (FCRL5), also known as FcRH5, IRTA2, and CD307, is a 120 kDa protein 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, 2). According to R&D Systems testing, FCRL5 binds to purified human IgG with high affinity. Mature human FCRL5 consists of a 836 amino acid (aa) extracellular domain (ECD) with nine Ig-like domains, a 21 aa transmembrane segment, and a 105 aa cytoplasmic domain with one immunotyrosine activation motif (ITAM) and two immunotyrosine inhibitory motifs (ITIMs) (1, 3). Mouse FCRL5 contains only five Ig-like domains in its ECD. It shares 49% aa sequence identity with human FCRL5 within common regions. Alternate splicing of human FCRL5 generates isoforms that consist of approximately the first one, six, or eight Ig-like domains (3, 4). FCRL5 expression is restricted to mature B lineage cells in lymphoid tissues and blood (3, 5-7). Its ligation inhibits signaling through the B cell antigen receptor (8). Epstein-Barr virus transformation of B cells induces the up-regulation of surface FCRL5 by a direct effect of its EBNA2 protein on FCRL5 gene transcription (9). The FCRL5 gene maps to the 1q21 chromosomal locus, a common site of rearrangements in B cell malignancies, and the FCRL5 protein is preferentially expressed in cell lines with 1q21 abnormalities (3). FCRL5 is up-regulated on tumor cells in some types of B cell malignancies (6, 10-12). In addition, soluble FCRL5 is elevated in the serum of many B cell leukemia patients (11, 13).

## References:

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