

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human FCRL5/FcRH5 Gln16-Arg844 Accession # AAK93971
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.

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

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).

PRODUCT SPECIFIC NOTICES

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