

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FCRL5/FcRH5 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) FCRL1, rhFCRL2, rhFCRL3, or rhFCRL4 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 307314
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human FCRL5/FcRH5 Gln16-Arg844 (predicted) Accession # AAI01067
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

Western Blot 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.