

#### DESCRIPTION

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|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human FCRL3/FcRH3 in direct ELISAs. In direct ELISAs, approximately 15% cross-reactivity with recombinant human (rh) IRTA2 and rhIRTA5 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 FCRL3/FcRH3<br>Arg14-Arg569<br>Accession # NP_443171                                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>    | Optimal dilution of this antibody should be experimentally determined. |
| <b>Flow Cytometry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

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

#### 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).

#### PRODUCT SPECIFIC NOTICES

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