

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FCRL2/FcRH2 in Western blots. In Western blots, approximately 20% cross-reactivity with recombinant human(rh) IRTA1 and IRTA5 is observed. Less than 6% cross-reactivity with rhIRTA3 and rhIRTA4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human FCRL2/FcRH2 Glu15-Asp395 Accession # Q96LA5
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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	0.1 µg/mL	Recombinant Human FCRL2/FcRH2 (Catalog # 2048-FC)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 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

Fc receptor-like 2 (FCRL2), also known as FcRH2 and IRTA4, belongs to the family of glycoprotein homologs of classical immunoglobulin (Ig) Fc receptors. In human, the type I transmembrane FCRL protein family contains from three to nine immunoglobulin-like domains (1, 2). Mature human FcRH2 consists of a 382 amino acid (aa) extracellular domain (ECD) with four Ig-like C2-set domains, a 21 aa transmembrane segment, and an 86 aa cytoplasmic domain with one ITAM-like, and two ITIM-like motifs (3-5). Alternate splicing of human FCRL2 may generate isoforms with N-terminal, internal, or C-terminal deletions (4, 5). The gene for FcRH2 maps to the human Iq21-23 locus which is a hotspot for chromosomal translocation events associated with B cell malignancies (3, 6). Although there are several Fc receptor-like genes in the mouse, none of these is a clear ortholog to human FCRL2 (7). FCRL proteins are differentially expressed among B cells (2). FCRL2 is preferentially expressed on naïve and CD27⁺ memory B cells within the spleen, lymph nodes, tonsils, and peripheral blood (3, 4, 8, 9). It is also expressed on most B cells in B cell chronic lymphocytic leukemia (B-CLL) patients (10). FCRL2 up-regulation is associated with mutation of the immunoglobulin heavy chain variable (IGHV) and less aggressive forms of B-CLL (9, 11).

References:

1. Maltais, L.J. *et al.* (2006) *Nat. Immunol.* **7**:431.
2. Davis, R.S. *et al.* (2007) *Annu. Rev. Immunol.* **25**:525.
3. Miller, I. *et al.* (2002) *Blood* **99**:2662.
4. Davis, R.S. *et al.* (2001) *Proc. Natl. Acad. Sci.* **98**:9772.
5. Xu, M.J. *et al.* (2001) *Biochem. Biophys. Res. Commun.* **280**:768.
6. Hatzivassiliou, G. *et al.* (2001) *Immunity* **14**:277.
7. Davis, R.S. *et al.* (2004) *Int. Immunol.* **16**:1343.
8. Polson, A.G. *et al.* (2006) *Int. Immunol.* **18**:1363.
9. Huttman, A. *et al.* (2006) *Leukemia* **20**:1774.
10. Kazemi, T. *et al.* (2008) *Int. J. Cancer* **123**:2113.
11. Li, F.J. *et al.* (2008) *Blood* **112**:179.