

# Human FCRL2/FcRH2 , FCRL5/FcRH5 Alexa Fluor® 594-conjugated Antibody

Monoclonal Mouse IgG<sub>1</sub> Clone # 296902

Catalog Number: FAB2048T

100 µg

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human FCRL2/FcRH2 and FCRL5/FcRH5 in Western blots. In Western blots, approximately 25% cross-reactivity with recombinant human FCRL1, FCRL3, and FCRL4 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 296902
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human FCRL2/FcRH2 Glu15-Asp395 Accession # Q96LA5
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Human peripheral blood monocytes

## 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>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## 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<sup>+</sup> 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 upregulation 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.

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## PRODUCT SPECIFIC NOTICES

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