

Human FCRL2/FcRH2, FCRL5/FcRH5 Alexa Fluor® 647-conjugated Antibody

Monoclonal Mouse IgG₁ Clone # 296902 Catalog Number: FAB2048R 100 μg

DESCRIPTION			
Species Reactivity	Human		
Specificity	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.		
Source	Monoclonal Mouse IgG ₁ Clone # 296902		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Mouse myeloma cell line NS0-derived recombinant human FCRL2/FcRH2 Glu15-Asp395 Accession # Q96LA5		
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm		
Formulation	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 Shee (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		
Flow Cytometry	0.25-1 μg/10 ⁶ cells	Human peripheral blood monocytes		

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 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 upregulation is associated with mutation of the immunoglobulin heavy chain variable (IGHV) and less aggressive forms of B-CLL (9, 11).

References:

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- 6. Hatzivassiliou, G. et al. (2001) Immunity 14:277.
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