

#### DESCRIPTION

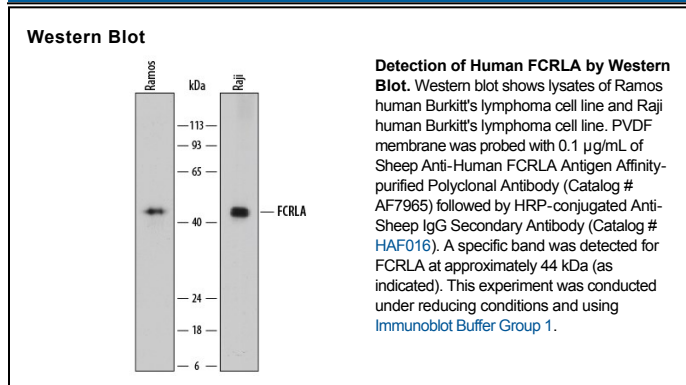
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human FCRLA in direct ELISAs and Western blots. In direct ELISAs, approximately 5-10% cross-reactivity with recombinant mouse FCRLA is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human FCRLA Pro270-Glu359 Accession # Q7L513
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

#### 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>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	See Below

#### DATA



#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

FCRLA (Fc Receptor-Like A; also known as FcRX, FcRL1 and Fc receptor Homolog Expressed in B cells/FREB) is a 40-44 kDa intracellular member of the FcγRI class, FcR family, Immunoglobulin Superfamily of molecules. Initially, it is associated with germinal center B cells that are undergoing somatic hypermutation and class-switch recombination. Now, it is believed that all B cells (but not CD38<sup>+</sup> plasma cells) are also FCRLA<sup>+</sup>. FCRLA is suggested to act as an ER chaperone during antibody maturation, and is known to bind to IgM, IgA, and IgG prior to their secretion. Human FCRLA is synthesized as a 359 amino acid (aa) precursor that contains a 27 aa signal sequence plus a mature region that contains two C2-type Ig-like domains (aa 70-159 and 170-257), and a C-terminal poly-Proline region (aa 269-315). Although there is no traditional ER retention signal, a viable substitute is assumed to exist in the N-terminus of the mature molecule. FCLRA is believed to exist naturally as a monomer; however, disulfide-linkage can occur during experimental manipulation. At least eight potential isoform variants have been reported. It is unclear if, or how frequently they are expressed. One utilizes an alternative start site 17 aa upstream of the standard site, a second contains a six aa insertion after Ala28, and a third possesses an four aa substitution for aa 29-166. Five show single block deletions; in random order, they involve aa 78-166, 27-166, 78-261, 21-261 and 167-26. Over aa 270-359, human FCLRA shares 55% aa sequence identity with mouse FCRLA.