

**Anti-CD22 Picoband Antibody**  
**Catalog # ABO12377****Specification****Anti-CD22 Picoband Antibody - Product Information**

Application	WB, IHC-P, IHC-F, FC, ICC
Primary Accession	<a href="#">P20273</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for B-cell receptor CD22(CD22) detection. Tested with WB, IHC-P, IHC-F, ICC, FCM in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-CD22 Picoband Antibody - Additional Information****Gene ID 933****Other Names**

B-cell receptor CD22, B-lymphocyte cell adhesion molecule, BL-CAM, Sialic acid-binding Ig-like lectin 2, Siglec-2, T-cell surface antigen Leu-14, CD22, CD22, SIGLEC2

**Calculated MW**

95348 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat  
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml  
Immunocytochemistry, 0.5-1 µg/ml  
Western blot, 0.1-0.5 µg/ml  
Flow Cytometry, 1-3<sup>1</sup>/<sub>4</sub>g/1x10<sup>6</sup> cells

**Subcellular Localization**

Cell membrane; Single-pass type I membrane protein.

**Tissue Specificity**

B-lymphocytes.

**Protein Name**

B-cell receptor CD22

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human CD22 (696-724aa

LAILILAICGLKLQRRWKRTQSQQGLQEN), different from the related mouse sequence by ten amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

At -20°C for one year. After r° Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Anti-CD22 Picoband Antibody - Protein Information**

Name CD22 {ECO:0000303|PubMed:1691828, ECO:0000312|HGNC:HGNC:1643}

**Function**

Most highly expressed siglec (sialic acid-binding immunoglobulin-like lectin) on B-cells that plays a role in various aspects of B-cell biology including differentiation, antigen presentation, and trafficking to bone marrow (PubMed:<a href="http://www.uniprot.org/citations/34330755" target="\_blank">34330755</a>, PubMed:<a href="http://www.uniprot.org/citations/8627166" target="\_blank">8627166</a>). Binds to alpha 2,6-linked sialic acid residues of surface molecules such as CD22 itself, CD45 and IgM in a cis configuration. Can also bind to ligands on other cells as an adhesion molecule in a trans configuration (PubMed:<a href="http://www.uniprot.org/citations/20172905" target="\_blank">20172905</a>). Acts as an inhibitory coreceptor on the surface of B-cells and inhibits B-cell receptor induced signaling, characterized by inhibition of the calcium mobilization and cellular activation. Mechanistically, the immunoreceptor tyrosine-based inhibitory motif domain is phosphorylated by the Src kinase LYN, which in turn leads to the recruitment of the protein tyrosine phosphatase 1/PTPN6, leading to the negative regulation of BCR signaling (PubMed:<a href="http://www.uniprot.org/citations/8627166" target="\_blank">8627166</a>). If this negative signaling from is of sufficient strength, apoptosis of the B-cell can be induced (PubMed:<a href="http://www.uniprot.org/citations/20516366" target="\_blank">20516366</a>).

**Cellular Location**

Cell membrane; Single-pass type I membrane protein

**Tissue Location**

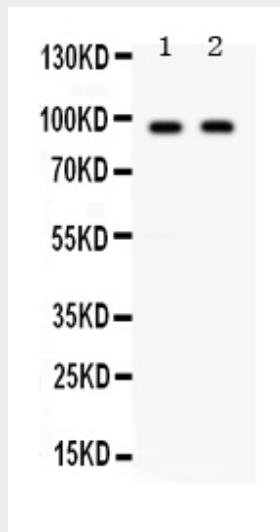
B-lymphocytes.

**Anti-CD22 Picoband Antibody - Protocols**

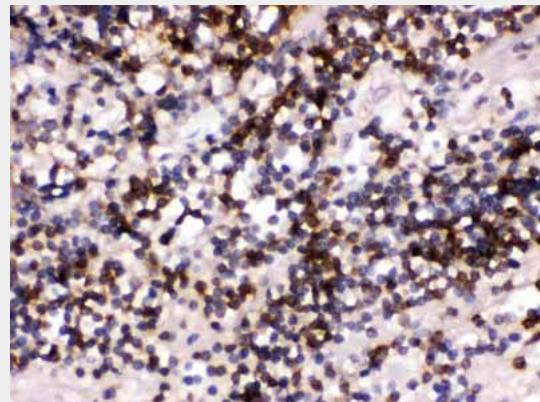
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

**Anti-CD22 Picoband Antibody - Images**

Anti- CD22 Picoband antibody, ABO12377, Western blotting  
All lanes: Anti CD22 (ABO12377) at 0.5ug/ml  
Lane 1: MCF-7 Whole Cell Lysate at 40ug  
Lane 2: 22RV1 Whole Cell Lysate at 40ug  
Predicted bind size: 95KD  
Observed bind size: 95KD



Anti- CD22 Picoband antibody, ABO12377, IHC(P)  
IHC(P): Human Tonsil Tissue

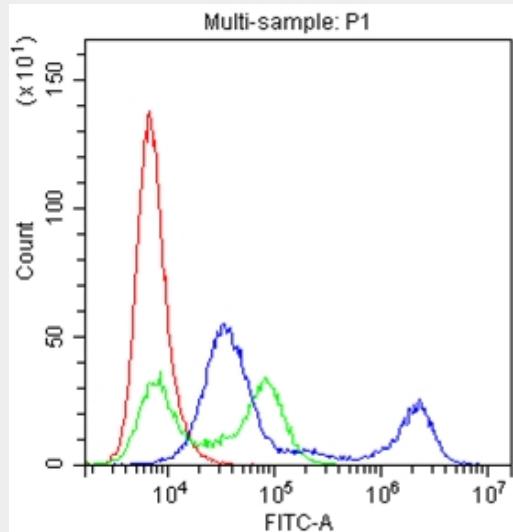


Figure 3. Flow Cytometry analysis of Raji cells using anti-CD22 antibody (ABO12377). Overlay histogram showing Raji cells stained with ABO12377 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD22 Antibody (ABO12377, 1 $\frac{1}{4}$ g/1x10<sup>6</sup> cells) for 30 min at 20 $^{\circ}$ C. DyLight<sup>®</sup>488 conjugated goat anti-rabbit IgG (BA1127, 5-10 $\frac{1}{4}$ g/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20 $^{\circ}$ C. Isotype control antibody (Green line) was rabbit IgG (1 $\frac{1}{4}$ g/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

#### Anti-CD22 Picoband Antibody - Background

CD22 is a surface glycoprotein of B lymphocytes that is rapidly phosphorylated on cytoplasmic tyrosines after antigen receptor cross-linking. It is a negative regulator of antigen receptor signaling whose onset of expression at the mature B cell stage may serve to raise the antigen concentration threshold required for B cell triggering. The human CD22 gene is expressed specifically in B lymphocytes and likely has an important function in cell-cell interactions. The B cell coreceptor CD22 plays an important role in regulating signal transduction via the B cell Ag receptor. And CD22 is located within the band region q13.1 of chromosome 19.