

**Anti-CD22 Antibody**  
Catalog # ABO10514**Specification**

---

**Anti-CD22 Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P20273</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

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

**Reconstitution**

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

**Anti-CD22 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, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**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 Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human CD22(832-847aa ERPQAQENVDYVILKH).

**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.**

**Sequence Similarities**

Belongs to the immunoglobulin superfamily. SIGLEC (sialic acid binding Ig-like lectin) family.

**Anti-CD22 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/8627166" target="\_blank">8627166</a>, PubMed:<a href="http://www.uniprot.org/citations/34330755" target="\_blank">34330755</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.

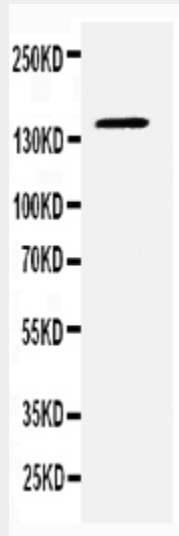
**Anti-CD22 Antibody - Protocols**

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

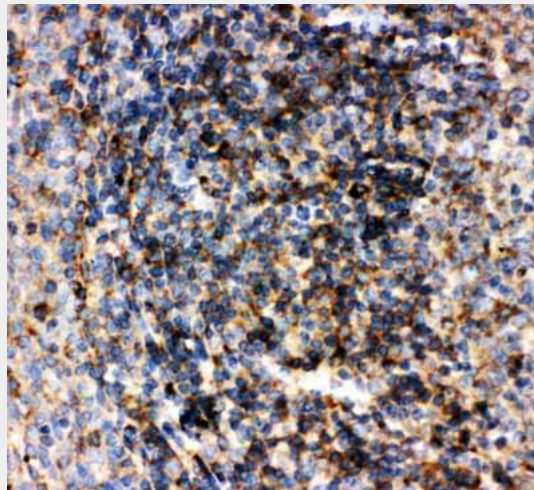
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

## Anti-CD22 Antibody - Images



Anti-CD22 antibody, ABO10514, Western blottingWB: RAJI Cell Lysate



Anti-CD22 antibody, ABO10514, IHC(P)IHC(P): Human Tonsil Tissue

## Anti-CD22 Antibody - Background

CD22 is a surface glycoprotein of B lymphocytes that is rapidly phosphorylated on cytoplasmic tyrosines after antigen receptor cross-linking. CD22 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.<sup>3</sup> CD22 is located within the band region q13.1 of chromosome 19.