

# **CD22 Antibody**

Rabbit mAb Catalog # AP90342

### **Specification**

#### **CD22 Antibody - Product Information**

Application WB
Primary Accession P20273
Reactivity Rat

Clonality Monoclonal

**Other Names** 

CD22; BLCAM; Leu14; Lyb8; SIGLEC2; B cell receptor CD22 precursor; MGC130020;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 95348 Da

# **CD22 Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

**CD22** 

Description Acts as a regulator of B cell signaling.

CD22 is expressed as both a cytoplasmic and membrane protein during discrete stages of B cell lymphocyte differentiation. The cytoplasmic form of CD22, expressed early in B cell development, is a useful marker for acute lymphocytic leukemia. The membrane form of CD22 is expressed

in mature B cells prior to their differentiation into plasma cells.

Alternative splicing results in two different

isoforms, CD22α and CD22β.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **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/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

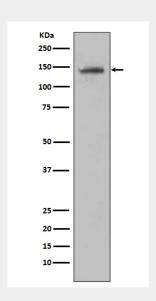
**Tissue Location** B-lymphocytes.

#### **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 Cytomety
- Cell Culture

## CD22 Antibody - Images



Western blot analysis of Raji cell lysate using CD22 antibody.