

Anti-CD22 Antibody

Catalog # ABO10514

Product Information

Application	WB, IHC-P
Primary Accession	P20273
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 in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cell membrane; Single-pass type I membrane protein.
Tissue Specificity	B-lymphocytes.
Source	Eukaryota
Protein Name	B-cell receptor CD22
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human CD22(832-847aa ERPQAQENVYVILKH).
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.

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: 34330755 , PubMed: 8627166). 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: 20172905). 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: 8627166). If this negative signaling from is of sufficient strength, apoptosis of the B-cell can be induced (PubMed: 20516366).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	B-lymphocytes.

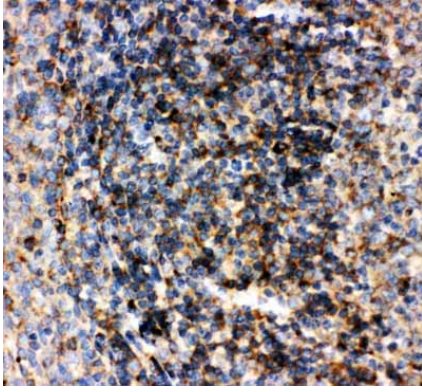
Background

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.³ CD22 is located within the band region q13.1 of chromosome 19.

Images



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



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

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