

Anti-CD22 Picoband Antibody

Catalog # ABO12377

Product Information

Application	WB, IHC-P, IHC-F, FC, ICC
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, IHC-F, ICC, FCM 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 μ g/ml, By Heat Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml Immunocytochemistry, 0.5-1 μ g/ml Western blot, 0.1-0.5 μ g/ml Flow Cytometry, 1-3 μ g/1x10 ⁶ cells
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 NaN ₃ .
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 reconstitution, 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.

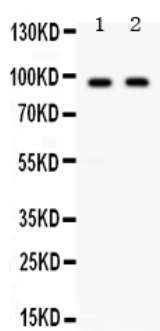
Protein Information

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

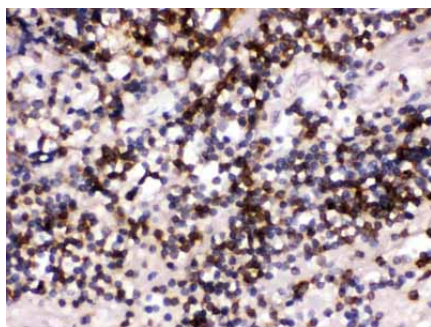
CD22 is a surface glycoprotein of B lymphocytes that is rapidly phosphorylated on cytoplasmic tyrosines after antigen receptor cross-linking. It is a negative regulator of antigen receptor signaling whose onset of expression at the mature B cell stage may serve to raise the antigen concentration threshold 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.

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

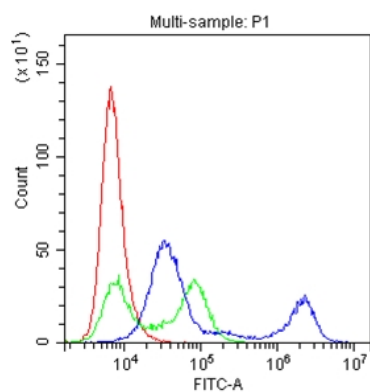


Figure 3. Flow Cytometry analysis of Raji cells using anti-CD22 antibody (ABO12377). Overlay histogram showing Raji cells stained with ABO12377 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD22 Antibody (ABO12377, 1 μ g/1x10⁶ cells) for 30 min at 20 $^{\circ}$ C. DyLight²488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 $^{\circ}$ C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.