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Anti-CD22 Picoband Antibody

Catalog # ABO12377

Specification

Anti-CD22 Picoband Antibody - 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.

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, 1-3Î¼g/1x10⁶cells

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 Na2HPO4, 0.05mg NaN3.

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: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.

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 Cytomety

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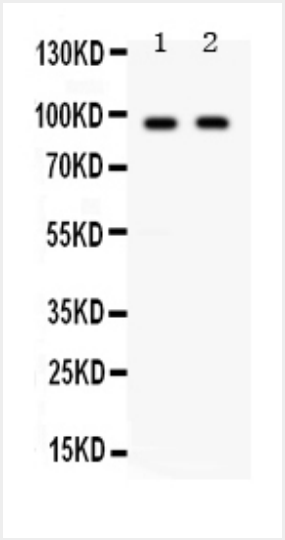
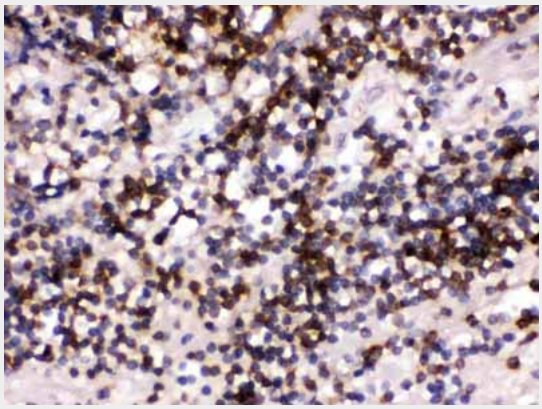
- Cell Culture

Anti-CD22 Picoband Antibody - Images



Anti- CD22 Picoband antibody, ABO12377, Western blottingAll lanes: Anti CD22 (ABO12377) at 0.5ug/mlLane 1: MCF-7 Whole Cell Lysate at 40ugLane 2: 22RV1 Whole Cell Lysate at 40ugPredicted bind size: 95KDObserved bind size: 95KD



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

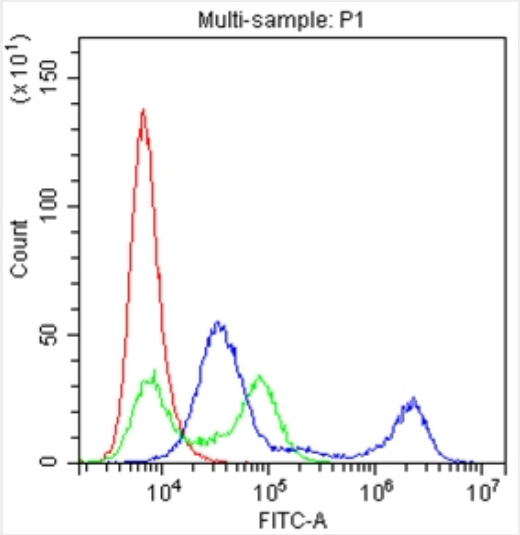


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Figure 3. Flow Cytometry analysis of Raji cells using anti-CD22 antibody (ABO12377).Overlay histogram showing Raji cells stained with ABO12377 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD22 Antibody (ABO12377,1Î¼g/1x106 cells) for 30 min at 20Â°C. DyLight?488 conjugated goat anti-rabbit IgG (BA1127, 5-10Î¼g/1x106 cells) was used as secondary antibody for 30 minutes at 20Â°C. Isotype control antibody (Green line) was rabbit IgG (1Î¼g/1x106) 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.