

Anti-CD22 / BL-CAM Antibody Mouse Monoclonal Antibody Catalog # AH13612

Specification

Anti-CD22 / BL-CAM Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

,1,14,3,4,10, <u>P20273</u> <u>579691</u> Human Mouse Monoclonal Mouse / IgG1, kappa 95348

Anti-CD22 / BL-CAM Antibody - Additional Information

Gene ID 933

Other Names

B-lymphocyte cell adhesion molecule (BL-CAM); B-cell receptor CD22; CD22; Lectin 2; Lyb8; Sialic acid-binding Ig-like lectin 2 (Siglec-2); SIGLEC2; T-cell surface antigen Leu-14

Format

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions

Anti-CD22 / BL-CAM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-CD22 / BL-CAM 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: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

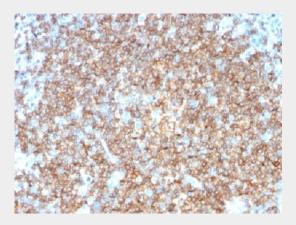
Tissue Location B-lymphocytes.

Anti-CD22 / BL-CAM Antibody - Protocols

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

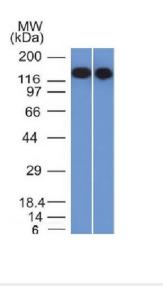
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CD22 / BL-CAM Antibody - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD22 Monoclonal Antibody (BLCAM/1795).





Western Blot Analysis of Raji and Ramos Cell Lysates using CD22 Monoclonal Antibody (BLCAM/1795).

Anti-CD22 / BL-CAM Antibody - Background

Recognizes a protein of 130-140kDa, identified as CD22 (also known as BL-CAM). CD22 expression is restricted to normal and neoplastic B cells and is absent from other haemopoietic cell types. In B-cell ontogeny, CD22 is first expressed in the cytoplasm of pro-B and pre-B cells, and on the surface as B cells mature to become IgD+. It is not expressed by plasma cells, CD22 is found highly expressed in follicular mantle and marginal zone B-cells, and while germinal center B-cells are relatively weak. CD22 is a member of the immunoglobulin superfamily and serves as an adhesion receptor for sialic acid-bearing ligands expressed on erythrocytes and all leukocyte classes. It also associates with tyrosine kinases and play a role in signal transduction and B-cell activation.