

Rabbit anti-Human CD22 Monoclonal Antibody | anti-CD22 antibody

Recombinant Anti-CD22 Antibody, Rabbit Monoclonal

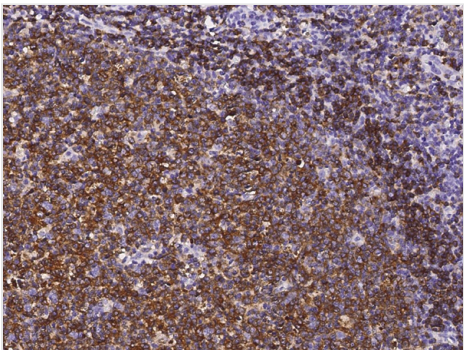
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255491	Rabbit	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

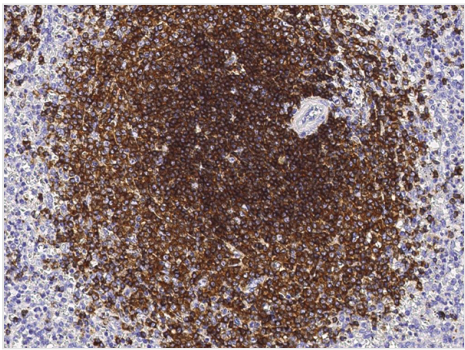
CD22; Monoclonal Antibody; Recombinant Anti-CD22 Antibody; Rabbit Monoclonal; CD22 Antibody; Rabbit MAb; CD22 molecule; Anti-SIGLEC-2 Antibody; Anti-SIGLEC2 Antibody; anti-CD22 antibody

PRODUCT SPECIFICATIONS

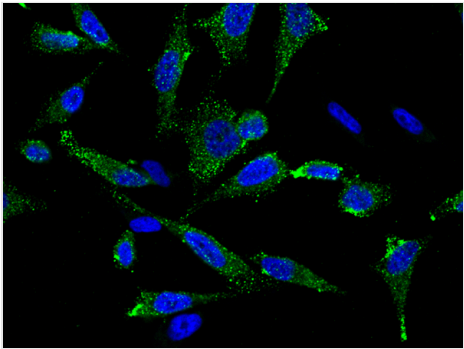
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	340
Specificity	Human CD22
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-CD22 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), ELISA
Antibody Type	Recombinant Antibody
Immunogen	Recombinant Human CD22 protein
Conjugation	Unconjugated
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Human CD22 (rh CD22).
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.



IHC (Immunohistochemistry)
Immunochemical staining of human CD22 in human tonsil with rabbit monoclonal antibody at 1:200 dilution, formalin-fixed paraffin embedded sections.



IHC (Immunohistochemistry)
Immunochemical staining of human CD22 in human spleen with rabbit monoclonal antibody at 1:200 dilution, formalin-fixed paraffin embedded sections.



IF (Immunofluorescence)
Immunofluorescence staining of CD22 in HeLa cells. Cells were fixed with 4% PFA, blocked with 10% serum, and incubated with rabbit anti-Human CD22 monoclonal antibody (1:60) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue).

ADDITIONAL INFORMATION

Related Product Information for anti-CD22 antibody	CD22 is a member of the immunoglobulin superfamily, SIGLEC family of lectins. It is first expressed in the cytoplasm of pro-B and pre-B cells, and on the surface as B cells mature to become IgD+. CD22 serves as an adhesion receptor for sialic acid-bearing ligands expressed on erythrocytes and all leukocyte classes. In addition to its potential role as a mediator of intercellular interactions, signal transduction through CD22 can activate B cells and modulate antigen receptor signaling in vitro. The phenotype of CD22-deficient mice suggests that CD22 is primarily involved in the generation of mature B cells within the bone marrow, blood, and marginal zones of lymphoid tissues. CD22 recruits the tyrosine phosphatase Src homology 2 domain-containing phosphatase 1 (SHP-1) to immunoreceptor tyrosine-based inhibitory motifs (ITIMs) and inhibits B-cell receptor (BCR)-induced Ca2+ signaling on normal B cells. CD22 interacts specifically with ligands carrying alpha2-6-linked sialic acids. As an inhibitory coreceptor of the B-cell receptor (BCR), CD22 plays a critical role in establishing signalling thresholds for B-cell activation. Like other coreceptors, the ability of CD22 to modulate B-cell signalling is critically dependent upon its proximity to the BCR, and this in turn is governed by the binding of its extracellular domain to alpha2, 6-linked sialic acid ligands. However, genetic studies in mice reveal that some CD22 functions are regulated by ligand binding, whereas other functions are ligand-independent and may only require expression of an intact CD22 cytoplasmic domain at the B-cell surface. CD19 regulates CD22 phosphorylation by augmenting Lyn kinase activity, while CD22 inhibits CD19 phosphorylation via SHP-1.
Product Categories/Family for anti-CD22 antibody	Cancer Drug Targets ITIM/ITAM Immunoreceptors and Related Molecules ; B Cell Receptor Signaling Pathway

References	Tedder TF, et al. (1997) CD22, a B lymphocyte-specific adhesion molecule that regulates antigen receptor signaling. Annu Rev Immunol. 15: 481-504. Tedder TF, et al. (2005) CD22: a multifunctional receptor that regulates B lymphocyte survival and signal transduction. Adv Immunol. 88: 1-50. Fujimoto M, et al. (2007) B cell signaling and autoimmune diseases: CD19/CD22 loop as a B cell signaling device to regulate the balance of autoimmunity. J Dermatol Sci. 46(1): 1-9. Walker JA, et al. (2008) CD22: an inhibitory enigma. Immunology. 123(3): 314-25. Nitschke L. (2009) CD22 and Siglec-G: B-cell inhibitory receptors with distinct functions. Immunol Rev. 230(1): 128-43.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	297374825
NCBI GeneID	933
NCBI Accession #	NP_001172028.1
NCBI GenBank Nucleotide #	NM_001185099.1
UniProt Accession #	P20273; O95699; O95701; O95702; O95703; Q01665; Q92872; Q92873; Q9UQA6; Q9UQA7; Q9UQA8; F5H7U3
Molecular Weight	95,348 Da
NCBI Official Full Name	B-cell receptor CD22 isoform 2
NCBI Official Synonym Full Names	CD22 molecule
NCBI Official Symbol	CD22
NCBI Official Synonym Symbols	SIGLEC2; SIGLEC-2
NCBI Protein Information	B-cell receptor CD22; BL-CAM; CD22 antigen; T-cell surface antigen Leu-14; B-lymphocyte cell adhesion molecule; sialic acid binding Ig-like lectin 2; sialic acid-binding Ig-like lectin 2
UniProt Protein Name	B-cell receptor CD22
UniProt Gene Name	CD22
UniProt Synonym Gene Names	SIGLEC2; BL-CAM; Siglec-2
UniProt Entry Name	CD22_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.