

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

Anti-CD22 Antibody, Rabbit Polyclonal

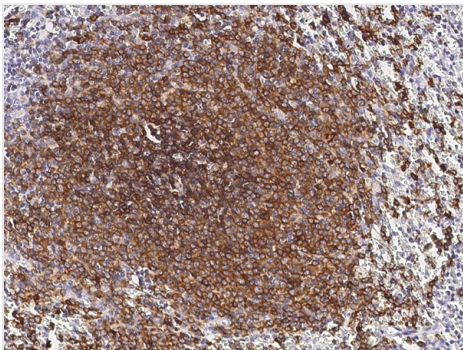
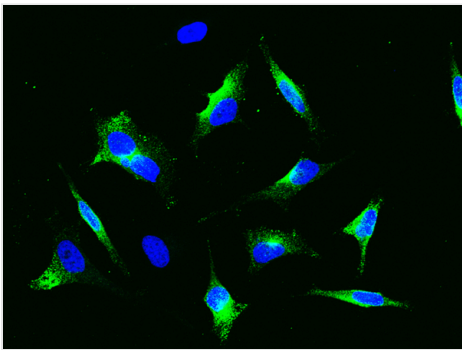
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255492	Rabbit	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

CD22; Polyclonal Antibody; Anti-CD22 Antibody; Rabbit Polyclonal; CD22/Siglec-2 Antibody; Rabbit PAb; Antigen Affinity Purified; CD22 molecule; Anti-SIGLEC-2 Antibody; Anti-SIGLEC2 Antibody; anti-CD22 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human CD22/Siglec-2
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-CD22 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), ELISA
Immunogen	Recombinant Human CD22/Siglec-2 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human CD22/Siglec-2 (rh CD22/Siglec-2). CD22/Siglec-2 specific IgG was purified by Human CD22/Siglec-2 affinity chromatography.
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.

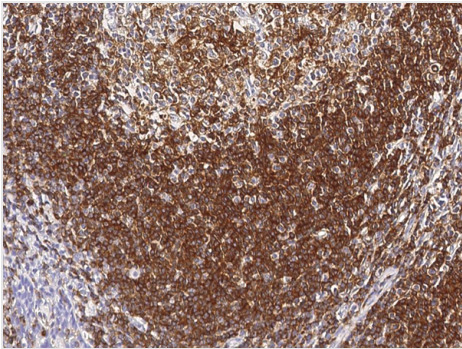


IF (Immunofluorescence)

Immunofluorescence staining of CD22 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-human CD22 polyclonal antibody (1:1000) at 4 degree C overnight. Then cells were stained with the Alexa Fluor488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cell membrane and cytoplasm.

IHC (Immunohistochemistry)

Immunochemical staining of human CD22 in human spleen with rabbit polyclonal antibody (1:5000, formalin-fixed paraffin embedded sections).



IHC (Immunohistochemistry)

Immunochemical staining of human CD22 in human tonsil with rabbit polyclonal antibody (1:5000, formalin-fixed paraffin embedded sections).

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. <i>Annu Rev Immunol.</i> 15: 481-504. Tedder TF, et al. (2005) CD22: a multifunctional receptor that regulates B lymphocyte survival and signal transduction. <i>Adv Immunol.</i> 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. <i>J Dermatol Sci.</i> 46(1): 1-9. Walker JA, et al. (2008) CD22: an inhibitory enigma. <i>Immunology.</i> 123(3): 314-25. Nitschke L. (2009) CD22 and Siglec-G: B-cell inhibitory receptors with distinct functions. <i>Immunol Rev.</i> 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.