

CD22 Polyclonal Antibody
Catalog # AP68923**Specification****CD22 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P20273
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

CD22 Polyclonal Antibody - Additional Information**Gene ID** 933**Other Names**

CD22; SIGLEC2; 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; CD antigen CD22

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

CD22 Polyclonal 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: [8627166](http://www.uniprot.org/citations/8627166), PubMed: [34330755](http://www.uniprot.org/citations/34330755)). 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/8627166)). If this negative signaling from is of sufficient strength, apoptosis of the B-cell can be induced (PubMed: [20516366](http://www.uniprot.org/citations/20516366))

target="_blank">20516366).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

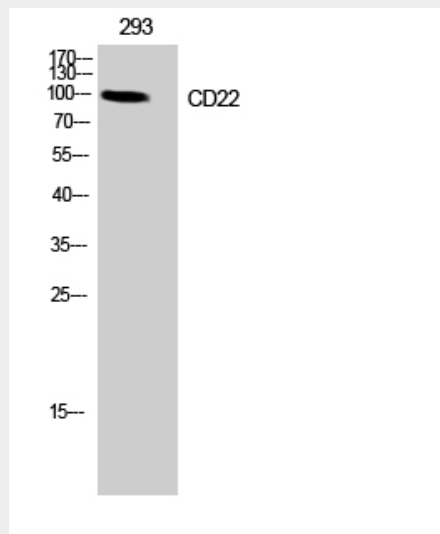
B-lymphocytes.

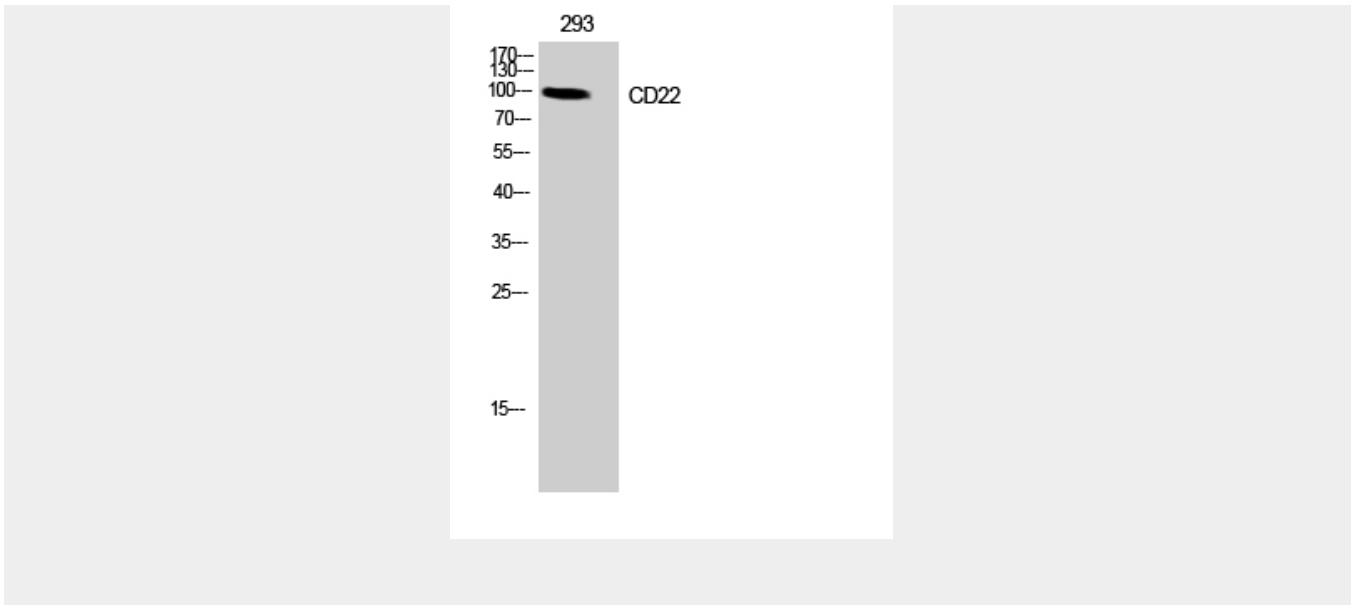
CD22 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD22 Polyclonal Antibody - Images





CD22 Polyclonal Antibody - Background

Mediates B-cell B-cell interactions. May be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules.