Recombinant CD22 Monoclonal Antibody

catalog number: AN300574P

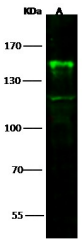
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Mouse
Immunogen	Recombinant Mouse CD22 Protein
Host	Rabbit
Isotype	IgG
Clone	B509
Purification	Protein A
Buffer	0.2 μm filtered solution in PBS

Applications	Recommended Dilution
WB	1:500-1:2000
IP	0.5-2 μL/mg of lysate

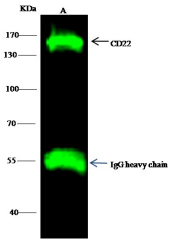
Data



Western Blot with CD22 Monoclonal Antibody at dilution of 1:500 dilution. Lane A: Raji Whole Cell Lysate, Lysates/proteins at 30 μg per lane.

Observed-MW:150 kDa

Calculated-MW:95 kDa



Immunoprecipitation analysis using 2 μL anti-Mouse CD22 Monoclonal Antibody and 60 μg of Immunomagnetic beads Protein G. Western blot was performed from the immunoprecipitate using CD22 Monoclonal Antibody at a dilution of 1:100. Lane A:0.5 mg 293T Whole Cell Lysate

Observed-MW:150 kDa

Calculated-MW:95 kDa

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

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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.

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