Data Sheet (Cat.No.TMAY-03566)

Anti-Siglec-2/CD22 Antibody (4W529)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Mouse
Conjugation:	Unconjugated
Clone:	4W529
Purification:	Protein A

Applications

Verified Activity:	1. Anti-CD22 rabbit monoclonal antibody at 1:500 dilution. -Lane A: Raji Whole Cell lysate. -Lysates/proteins at 30 µg per lane. -Secondary -Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution. -Developed using the Odyssey technique. -Performed under reducing conditions. -Predicted band size:95 kDa. -Observed band size:150 kDa. 2. Mouse CD22 was immunoprecipitated using: -Lane A:0.5 mg 293T Whole Cell Lysate. -2 µL anti-Mouse CD22 rabbit monoclonal antibody and 60 µg of Immunomagnetic beads Protein G. -Primary antibody: -Anti-Mouse CD22 rabbit monoclonal antibody, at 1:100 dilution. -Secondary antibody: -Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution. -Developed using the odyssey technique. -Performed under reducing conditions. -Predicted band size: 150 kDa. -Observed band size: 150 kDa
Application:	IP,WB
Recommended	WB: 1:500-1:2000; IP: 0.5-2 µL/mg of lysate

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Mouse CD22 Protein (TMPY-04083)
Antigen Species:	Mouse
Synonyms:	SIGLEC2;CD22 molecule;SIGLEC-2
Biology Area:	Cancer Drug Targets, ITIM/ITAM Immunoreceptors and Related Molecules

Research Background

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.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481