Data Sheet (Cat.No.TMAY-02165C)

TargetMol

Anti-Siglec-2/CD22 Antibody-PerCP (1M79)

Product Details

Ig Type:	Mouse IgG1
Reactivity:	Human
Conjugation:	PerCP
Clone:	1M79
Purification:	Protein A

Applications

Verified Activity:	Flow cytometric analysis of Human CD22 expression on human whole blood lymphocytes. Cells were stained with PerCP-conjugated anti-Human CD22 and APC-conjugated anti-Human CD19. The dot plots were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes.
Application:	FCM
Recommended	10 µl/Test, 0.1 mg/ml

Properties

Stability & Storage:	Store at 2°C-8°C for 12 months, do not freeze. Keep away from direct sunlight. Sodium azide is toxic to cells and should be disposed of properly. Flush with large volumes of water during disposal.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human CD22/Siglec-2 Protein (TMPY-02034)
Antigen Species:	Human
Synonyms:	SIGLEC-2;SIGLEC2;CD22 molecule
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