ARG62774
anti-CD22 antibody [MEM-01] (Biotin)

Package: 100 µg
Store at: 4°C

Summary

Product Description	Biotin-conjugated Mouse Monoclonal antibody [MEM-01] recognizes CD22
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS
Specificity	The clone MEM-01 reacts with CD22 (BL-CAM), a 130 kDa type I transmembrane glycoprotein (immunoglobulin superfamily) expressed in the cytoplasm of pro-B and pre-B lymphocytes, and on the surface of mature and activated B lymphocytes; it is lost on plasma cells, peripheral blood T lymphocytes, granulocytes and monocytes. MEM-01 cross-blocks the antibody OTH228 that recognizes uniquely epitope "E"; it does not cross-block antibodies RFB-4, CLB22/1 and CLB-BLy1.
Host	Mouse
Clonality	Monoclonal
Clone	MEM-01
Isotype	IgG1
Target Name	CD22
Species	Human
Immunogen	Raji Burkitt's lymphoma cell line
Conjugation	Biotin
Alternate Names	B-lymphocyte cell adhesion molecule; B-cell receptor CD22; T-cell surface antigen Leu-14; BL-CAM; SIGLEC-2; Sialic acid-binding Ig-like lectin 2; Siglec-2; CD antigen CD22; SIGLEC2

Application Instructions

Application table

Application	Dilution
FACS	1 - 3 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

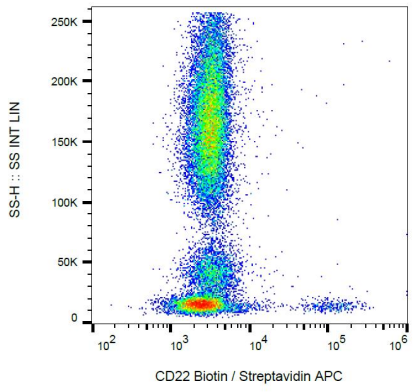
Form	Liquid
Purification Note	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

	repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 933 Human Swiss-port # P20273 Human
Gene Symbol	CD22
Gene Full Name	CD22 molecule
Background	CD22, also known as Siglec-2 (sialic acid-binding immunoglobulin-like lectin-2) is a transmembrane glycoprotein binding alpha2,6-linked sialic acid-bearing ligands. Intracellular domain of CD22 recruits protein tyrosine phosphatase SHP-1 through the immunoreceptor tyrosine-based inhibitory motifs (ITIMs), thus setting a treshold for B cell receptor-mediated activation. CD22 also regulates B-cell response by involvement in controlling the CD19/CD21-Src-family protein tyrosine kinase amplification pathway and CD40 signaling. CD22 exhibits hallmarks of clathrin-mediated endocytic pathway.
Function	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. [UniProt]
Research Area	Cancer antibody; Developmental Biology antibody; Immune System antibody; Immature B Cell Marker antibody
Calculated Mw	95 kDa
PTM	Phosphorylation of Tyr-762, Tyr-807 and Tyr-822 are involved in binding to SYK, GRB2 and SYK, respectively. Phosphorylation of Tyr-842 is involved in binding to SYK, PLCG2 and PIK3R1/PIK3R2. Phosphorylated on tyrosine residues by LYN.

Images



ARG62774 anti-CD22 antibody [MEM-01] (Biotin) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG62774 anti-CD22 antibody [MEM-01] (Biotin), followed by Streptavidin (APC).