

ARG62775 anti-CD22 antibody [MEM-01]

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [MEM-01] recognizes CD22
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS, IP, WB
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	Un-conjugated
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

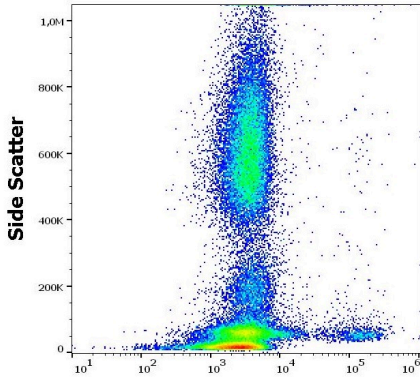
Application table	Application	Dilution
	FACS	2 - 4 µg/ml
	IP	Assay-dependent
	WB	2 - 4 µg/ml
Application Note	<p>WB: Under non-reducing condition, incubate 120 min on vertical incubator; Sample preparation for WB: resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. The antibody MEM-01 stains only the zone corresponding to 140 kDa, but not the weaker 130 kDa zone (stained by several CD22 antibodies recognizing both isoforms).</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	
Positive Control	WB: Raji, Human lymphoma cell line.	

Properties

Form	Liquid
Purification	Purified from ascites by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. 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.

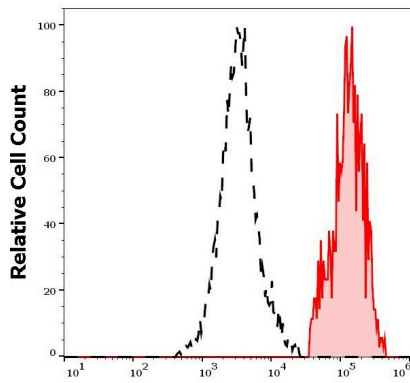
Bioinformation

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 threshold 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]
Highlight	<p>Related Antibody Duos and Panels:</p> <p>ARG30308 Immature B Cell Marker Antibody Panel (CD19, CD20, CD22, IgM Fc) (FACS)</p> <p>Related products:</p> <p>CD22 antibodies; CD22 ELISA Kits; CD22 Duos / Panels; Anti-Mouse IgG secondary antibodies;</p>
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.



ARG62775 anti-CD22 antibody [MEM-01] FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG62775 anti-CD22 antibody [MEM-01] at 0.6 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG62775 anti-CD22 antibody [MEM-01] FACS image

Flow Cytometry: Separation of human CD22 positive lymphocytes (red-filled) from human CD22 negative lymphocytes (black-dashed). Human peripheral whole blood stained with ARG62775 anti-CD22 antibody [MEM-01] at 0.6 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.