ARG62776
anti-CD22 antibody [IS7] (FITC)

Package: 100 tests
Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [IS7] recognizes CD22
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone IS7 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. HLDA IV; WS Code B 227 HLDA V; WS Code B CD22.8
Host	Mouse
Clonality	Monoclonal
Clone	IS7
Isotype	IgG1
Target Name	CD22
Species	Human
Immunogen	Reh human cell line
Conjugation	FITC
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	20 µl / 10^6 cells

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

Properties

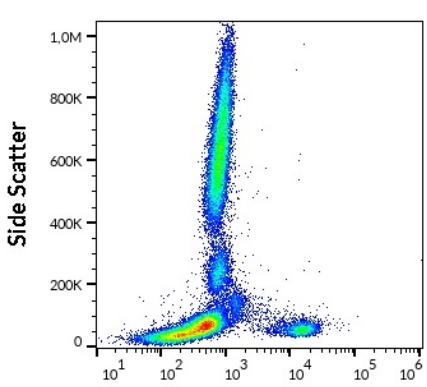
Form	Liquid
Purification Note	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
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

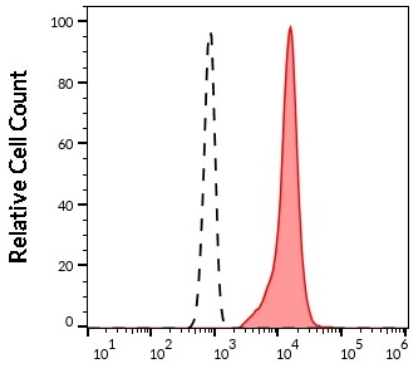
Database links	GeneID: 933 Human Swiss-port # P20273 Human
Gene Symbol	CD22
Gene Full Name	CD22 molecule
Background	CD22, also known as Siglec-2 (sialic acid-binding immunoglobulin-like lectin-2) is a transmembrane glycoprotein binding alpha2,6-linked sialic acid-bearing ligands. Intracellular domain 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



ARG62776 anti-CD22 antibody [IS7] (FITC) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG62776 anti-CD22 antibody [IS7] (FITC) (20 µl reagent / 100 µl of peripheral whole blood).



ARG62776 anti-CD22 antibody [IS7] (FITC) FACS image

Flow Cytometry: Separation of human CD22 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed), Human peripheral whole blood stained with ARG62776 anti-CD22 antibody [IS7] (FITC) (20 µl reagent / 100 µl of peripheral whole blood).