

### ARG53792 anti-CD22 antibody [IS7] (APC)

Package: 100 tests Store at: 4°C

# Summary

| Product Description | APC-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<br>(immunoglobulin superfamily) expressed in the cytoplasm of pro-B and pre-B lymphocytes, and on the<br>surface of mature and activated B lymphocytes; it is lost on plasma cells, peripheral blood T<br>lymphocytes, granulocytes and monocytes.<br>HLDA IV; WS Code B 227<br>HLDA V; WS Code B CD22.8 |
| Host                | Mouse   |
| Clonality           | Monoclonal  |
| Clone               | IS7   |
| Isotype             | lgG1  |
| Target Name         | CD22  |
| Species             | Human   |
| Immunogen           | Reh human cell line   |
| Conjugation         | APC   |
| Alternate Names     | B-lymphocyte cell adhesion molecule; B-cell receptor CD22; T-cell surface antigen Leu-14; BL-CAM;<br>SIGLEC-2; Sialic acid-binding Ig-like lectin 2; Siglec-2; CD antigen CD22; SIGLEC2   |

#### **Application Instructions**

| Application table | Application  | Dilution   |
|-------------------|--|--|
|                   | FACS   | 10 µl / 10^6 cells   |
| Application Note  | * The dilutions indicate recomme<br>should be determined by the scie | nded starting dilutions and the optimal dilutions or concentrations ntist. |

### Properties

| Form              | Liquid  |
|-------------------|---|
| Purification Note | The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions.<br>The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No<br>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   |

## Bioinformation

| Database links | GenelD: 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.<br>Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid.<br>The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell<br>surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in<br>regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction<br>with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic<br>phosphatases via their SH2 domains that block signal transduction through dephosphorylation of<br>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



#### ARG53792 anti-CD22 antibody [IS7] (APC) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG53792 anti-CD22 antibody [IS7] (APC).