EXBIO Antibodies

PRODUCT DATA SHEET

1P-265-T025

Monoclonal Antibody to CD22 Phycoerythrin (PE) conjugated (25 tests)

Clone: MEM-01

Isotype: Mouse IgG1

Specificity: The antibody 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.
The antibody 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.

Immunogen: Raji Burkitt's lymphoma cell line

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.
Do not use after expiration date stamped on vial label.
Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension.
The content of a vial (0.5 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

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.

References:
*Tedder TF, Poe JC, Haas KM: CD22: A Multifunctional Receptor That Regulates B Lymphocyte Survival and Signal Transduction. Adv Immunol. 2005;88:1-50.
*Tateno H, Li H, Schur MJ, Bovin N, Crocker PR, Wakarchuk WW, Paulson JC: Distinct endocytic mechanisms of CD22 (Siglec-2) and Siglec-F reflect roles in cell signaling and innate immunity. Mol Cell Biol. 2007 Aug;27(16):5699-710.
*Walker JA, Smith KG: CD22: an inhibitory enigma. Immunology. 2007 Dec 7

For laboratory research only, not for drug, diagnostic or other use.

EXBIO Praha | Nad Safinou II 341 | 252 42 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz