TECHNICAL DATA SHEET

CyFlow™ CD22 Purified
Anti-Hu; Clone MEM-01

REF **BH159259**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD22
Alternative Names	SIGLEC2, SIGLEC-2, BL-CAM
Clone	MEM-01
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Raji cells: human Burkitt's lymphoma cell line

Specificity

The mouse monoclonal antibody MEM-01 recognizes CD22 antigen, 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

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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.

Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD22 (Siglec-2; sialic acid-binding immunoglobulin-like lectin-2) is a transmembrane glycoprotein binding α 2,6-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. < PMID: 16227086 >
- 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. < PMID: 17562860 >
- Walker JA, Smith KG: CD22: An inhibitory enigma. Immunology. 2008 Mar; 123(3):314-25. < PMID: 18067554 >

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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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