

TECHNICAL DATA SHEET

CyFlow™ CD22 APC Anti-Hu; Clone IS7

REF BA114352

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD22
Alternative Names	SIGLEC2, SIGLEC-2, BL-CAM
Clone	IS7
Clonality	monoclonal
Format	APC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Reh human cell line

Specificity

The mouse monoclonal antibody IS7 recognizes CD22 antigen, a 130 kDa type I transmembrane glycoprotein (immunoglobulin superfamily) expressed in the cytoplasm of pro-B and pre-B lymphocytes,

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and on the surface of mature and activated B lymphocytes; it is lost on plasma cells, peripheral blood T lymphocytes, granulocytes and monocytes.

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing 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 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.

References

- Knapp W, Dorken B, Gilks W, Rieber EP, Schmidt RE, Stein H, von dem Borne AEGK (Eds): Leucocyte Typing IV. Oxford University Press, Oxford. 1989; 1-1820. < NLM ID: 8914679 >
- Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr; 46(4):334-6. < PMID: 7684403 >
- 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 >

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- 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 >

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

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