

TECHNICAL DATA SHEET

CyFlow™ CD22 PE Anti-Hu; Clone S-HCL-1

REF CS494603

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD22
Alternative Names	SIGLEC2, SIGLEC-2, BL-CAM
Clone	S-HCL-1
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG2b
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Whole hairy cell leukemia cells and membrane preparation

Contact Information:

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Specificity

The mouse monoclonal antibody S-HCL-1 (also known as S-HCL1) 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 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

- Foon KA, Todd RF 3rd: Immunologic classification of leukemia and lymphoma. Blood. 1986 Jul; 68(1):11324. < PMID: 2809561 >

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- James SE, Greenberg PD, Jensen MC, Lin Y, Wang J, Till BG, Raubitschek AA, Forman SJ, Press OW: Antigen sensitivity of CD22-specific chimeric TCR is modulated by target epitope distance from the cell membrane. J Immunol. 2008 May 15; 180(10):7028-38. < PMID: 18453625 >
- Reineks EZ, Osei ES, Rosenberg A, Auletta J, Meyerson HJ: CD22 expression on blastic plasmacytoid dendritic cell neoplasms and reactivity of anti-CD22 antibodies to peripheral blood dendritic cells. Cytometry B Clin Cytom. 2009 Jul; 76(4):237-48. < PMID: 19382197 >

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

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