

## TECHNICAL DATA SHEET

### CyFlow™ CD22 Alexa Fluor™ 700 Anti-Hu; Clone IS7

**REF** BM735466

**For Research Use Only.**

**Not for use in diagnostic or therapeutic procedures.**

### Specifications

<b>Antigen</b>	CD22
<b>Alternative Names</b>	SIGLEC2, SIGLEC-2, BL-CAM
<b>Clone</b>	IS7
<b>Clonality</b>	monoclonal
<b>Format</b>	Alexa Fluor™ 700
<b>Host / Isotype</b>	Mouse / IgG1
<b>Species Reactivity</b>	Human
<b>Negative Species Reactivity</b>	—
<b>Quantity</b>	100 tests
<b>Immunogen</b>	Reh human cell line

#### Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)

## 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, 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 4 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (0.4 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

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	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

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- 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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- 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](http://www.sysmex-partec.com/services).

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