

	Specifications
Specificity	CD22
Clone	SJ10.1H11
Hybridoma	SP2/0 x balb/c
Immunogen	Human NALM1 cell line
Isotype	IgG1
Species	Mouse
Purification	Affinity chromatography
Fluorochrome	R Phycoerythrin (PE)
Molar ratio	PE / Ig: 0.5 - 1.5
λ excitation	488 nm
Emission Peak	575 nm
Buffer	PBS pH 7.2 plus 2 mg / mL BSA and 0.1% NaN <sub>3</sub>

# IOTest Conjugated Antibody CD22-PE

REF IM1835U Liquid - 2 mL

Analyte Specific Reagent.

Analytical and performance characteristics are not established

## **REAGENTS**

Concentration: See lot specific Certificate of Analysis at www.beckmancoulter.com.

#### WARNING AND PRECAUTIONS

- 1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.
- 2. Specimens, samples and all material coming in contact with them should be considered potentially infectious and disposed of with proper precautions.
- 3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
- 4. Do not use antibody beyond the expiration date on the label.
- 5. Do not expose reagents to strong light during storage or incubation.
- 6. Avoid microbial contamination of reagents or incorrect results might occur.
- 7. Use good laboratory practices when handling this reagent.
- 8. Any change in the physical appearance of the reagents may indicate deterioration and the reagent should not be used.

### **GHS HAZARD CLASSIFICATION**

Not classified as hazardous

SDS	Safety Data Sheet is available at
	beckman com/techdocs

## STORAGE AND HANDLING CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at  $2 - 8^{\circ}$ C. Do not freeze.

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

#### **CONTENTS**

Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).

To avoid the possible build-up of azide compounds, flush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.

#### **SPECIFICITY**

The CD22 is a single chain, type I transmembrane molecule with a molecular weight of 130-140 kDa composed of seven Immunoglobulin-like (Ig- like) domains (1). Because these domains, part of the immunoglobulin superfamily (IgSF), show sialic acid binding protein properties, CD22 is a member of the sialoadhesin family, like CD33 and the myelin-associated glycoprotein (MAG) (2). The N-terminal domain, distal to the membrane, is a V-type Ig domain whereas the other six domains proximal to the membrane are C2-type Ig domains (2). The cytoplasmic domain of CD22 includes six tyrosines that are possible targets for phosphorylation. Some regions of the intracytoplasmic tail present homology to the tyrosine-based activation motifs (ITAM) and some others with the tyrosine-based inhibition motifs (ITIM) (2,3). CD22 appears constitutively associated with the BCR (B Cell antigen Receptor) and this may involve CD22 recognition of mIgM carbohydrate determinants (4,5,6). The CD22 mediates adhesion of B-B lymphocyte interactions, and B cells and erythrocytes or leucocyte interactions (2,5,7,8).

## **TRADEMARKS**

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#### ADDITIONAL INFORMATION

For additional information, or if damaged product is received, call Beckman Coulter Customer Service at 800-526-7694 (USA or Canada) or contact your local Beckman Coulter Representative.

## Symbols Key

Glossary of Symbols is available at beckman.com/techdocs (document number B60062)

#### REFERENCES

- 1. Kehrl, J., "CD22 workshop Panel report", 1995, Leucocyte Typing V, White Cell Differentiation Antigens. Schlossman, S.F., et al., Eds., Oxford University Press, 523-527.
- 2. Tedder, T.F., Tuscano, J., Sato,S., Kehrl, J.H., "CD22, A B lymphocyte-specific adhesion molecule that regulates antigen receptor signaling", 1997, Rev. Immunol., 15, 481 -504.
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- 4. Buhl, A.M., Cambier, J.C., "Co-receptor and accessory regulation of B-cell antigen receptor signal transduction", 1997, Immunol. Rev., 160, 127-138.
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- 7. Lynn Wilson.G., "Genomic structure and chromosomal mapping of the human CD22 gene", 1993, J. Immunol., 11, 150, 5013.
- 8. Stamenkovic, I., Sgroi, D., Aruffo, A., Sy, M.S., Anderson, T., "The B lymphocyte adhesion molecule CD22 interacts with leukocyte common antigen CD45RO on T cells and alpha2-6 sialyltranferase, CD75, on B cells", 1991, Cell, 66, 1133-1144.

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