

1A-503-T025

## Monoclonal Antibody to CD24 Allophycocyanin (APC) conjugated (25 tests)

<b>Clone:</b>	SN3
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	<p>The antibody SN3 reacts with CD24, a 35-45 kDa heavily glycosylated cell surface antigen. CD24 is expressed by granulocytes, B lymphocytes and by some activated T cells and T cell malignancies. It is not expressed on human thymocytes.</p> <p>HLDA IV; WS Code B 136 HLDA V; WS Code B CD24.7</p>
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	Glycoproteins purified from human NALM-1 cell line.
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	<p>The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.</p> <p>The content of a vial (0.25 ml) is sufficient for 25 tests.</p>
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	<p>CD24, also known as heat-stable antigen (HSA) or nectadorin, is a small mucin-like GPI-anchored extracellular membrane glycoprotein expressed on several cell types, including B cells. When B cells are activated and induced to further maturation, however, CD24 begins to disappear. CD24 seems to act as a gate-keeper for lipid rafts, thereby regulating the activity of integrins and other proteins such as the chemokine receptor CXCR4; it is also a ligand for P-selectin. CD24 triggering induces apoptosis of B cell precursors but not in mature resting B cells, where it instead inhibits their ability to proliferate in response to activation. CD24 expression is associated with invasiveness and poorer prognosis of carcinomas and is a marker of exosomes secreted into urine and amniotic fluid.</p>

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

- \*Suzuki T, Kiyokawa N, Taguchi T, Sekino T, Katagiri YU, Fujimoto J: CD24 induces apoptosis in human B cells via the glycolipid-enriched membrane domains/rafts-mediated signaling system. *J Immunol.* 2001 May 1;166(9):5567-77.
- \*Schabath H, Runz S, Joumaa S, Altevogt P: CD24 affects CXCR4 function in pre-B lymphocytes and breast carcinoma cells. *J Cell Sci.* 2006 Jan 15;119(Pt 2):314-25.
- \*Keller S, Rupp C, Stoeck A, Runz S, Fogel M, Lugert S, Hager HD, Abdel-Bakky MS, Gutwein P, Altevogt P: CD24 is a marker of exosomes secreted into urine and amniotic fluid. *Kidney Int.* 2007 Nov;72(9):1095-102.
- \*Chou YY, Jeng YM, Lee TT, Hu FC, Kao HL, Lin WC, Lai PL, Hu RH, Yuan RH: Cytoplasmic CD24 expression is a novel prognostic factor in diffuse-type gastric adenocarcinoma. *Ann Surg Oncol.* 2007 Oct;14(10):2748-58.
- \*Runz S, Mierke CT, Joumaa S, Behrens J, Fabry B, Altevogt P: CD24 induces localization of beta1 integrin to lipid raft domains. *Biochem Biophys Res Commun.* 2008 Jan 4;365(1):35-41.
- \*Barcos M, Pollard C, Fukukawa T, Seon BK: Follicular mantle zone cell subpopulations detected by monoclonal antibody SN3. *Hematol Oncol.* 1986 Oct-Dec;4(4):251-9.
- \*Fukukawa T, Matsuzaki H, Haruta Y, Hara H, Seon BK: New monoclonal antibodies SN3, SN3a, and SN3b directed to sialic acid of glycoprotein on human non-T leukemia cells. *Exp Hematol.* 1986 Oct;14(9):850-5.
- \*Maliar A, Servais C, Waks T, Chmielewski M, Lavy R, Altevogt P, Abken H, Eshhar Z: Redirected T cells that target pancreatic adenocarcinoma antigens eliminate tumors and metastases in mice. *Gastroenterology.* 2012 Nov;143(5):1375-1384
- \*Všianská P, Říhová L, Varmužová T, Suská R, Kryukov F, Mikulášová A, Kupská R, Penka M, Pour L, Adam Z, Hájek R: Analysis of B-cell subpopulations in monoclonal gammopathies. *Clin Lymphoma Myeloma Leuk.* 2015 Apr;15(4):e61-71.
- \*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).
- \*Fischer GF, Majdic O, Gadd S, Knapp W. Signal transduction in lymphocytic and myeloid cells via CD24, a new member of phosphoinositol-anchored membrane molecules. *J Immunol.* 1990 Jan 15;144(2):638-41.
- \*Solvason N, Kearney JF. The human fetal omentum: a site of B cell generation. *J Exp Med.* 1992 Feb 1;175(2):397-404.
- \*Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at [www.exbio.cz](http://www.exbio.cz).

**For laboratory research only, not for drug, diagnostic or other use.**

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic  
Tel: +420 261 090 666 | Fax: +420 261 090 660 | [orders@exbio.cz](mailto:orders@exbio.cz) | [www.exbio.cz](http://www.exbio.cz)