



1A-503-T100

## Monoclonal Antibody to CD24 Allophycocyanin (APC) conjugated (100 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 (1 ml) is sufficient for 100 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).

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