

T4-503-T025

Monoclonal Antibody to CD24 APC-Cy[™]7 conjugated (25 tests)

Clone: SN3

Isotype: Mouse IgG1

Specificity: 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.

HLDA IV; WS Code B 136 HLDA V; WS Code B CD24.7

Regulatory Status: RUO

Immunogen: Glycoproteins purified from human NALM-1 cell line.

Species Reactivity: Human

Preparation: The purified antibody is conjugated with tandem dye APC-Cy[™]7 under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: 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.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: 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.



PRODUCT DATA SHEET

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, Journaa 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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