

1A-396-T025

## Monoclonal Antibody to CD13 Allophycocyanin (APC) conjugated (25 tests)

Clone: WM15

**Isotype:** Mouse IgG1

**Specificity:** The antibody WM15 recognises the human CD13 cell surface glycoprotein, a 150

kDa molecule expressed on granulocytes, endothelial cells, epithelial cells and

myeloid progenitors.

HLDA III; WS Code M 213 HLDA IV; WS Code M 44 HLDA IV; WS Code M 209 HLDA V; WS Code M MA191

Regulatory Status: RUO

Immunogen: Human AML cells

Species Reactivity: Human, Non-Human Primates

**Preparation:** 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.

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

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

The content of a vial (0.25 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD13 (aminopeptidase N, APN) is a 150 kDa type II transmembrane zinc-binding

ectopeptidase expressed on various cell types. This metalloprotease preferentially catalyzes removal of neutral amino acids from small peptides, thus activating or inactivating bioactive peptides. CD13 has also role in extracellular matrix degradation, antigen processing and signal transduction, is important in inflammatory responses, regulates intercellular contact, cell motility and vascularization. CD13 is involved in protection of leukemic cells against apoptosis

and its expression associated with poor prognosis of carcinomas.



## PRODUCT DATA SHEET

## References:

\*Tokuhara T, Hattori N, Ishida H, Hirai T, Higashiyama M, Kodama K, Miyake M. Clinical significance of aminopeptidase N in non-small cell lung cancer. Clin Cancer Res. 2006 Jul 1;12(13):3971-8.

\*Petrovic N, Schacke W, Gahagan JR, O'Conor CA, Winnicka B, Conway RE, Mina-Osorio P, Shapiro LH. CD13/APN regulates endothelial invasion and filopodia formation. Blood. 2007 Jul 1;110(1):142-50.

\*Terauchi M, Kajiyama H, Shibata K, Ino K, Nawa A, Mizutani S, Kikkawa F. Inhibition of APN/CD13 leads to suppressed progressive potential in ovarian carcinoma cells. BMC Cancer. 2007 Jul 27;7:140.

\*Bradstock KF, Favaloro EJ, Kabral A, Kerr A, Hughes WG, Berndt MC, Musgrove E: Human myeloid differentiation antigens identified by monoclonal antibodies: expression on leukemic cells. Pathology. 1985 Jul;17(3):392-9.

\*Bradstock KF, Favaloro EJ, Kabral A, Kerr A, Hughes WG, Musgrove E: Myeloid progenitor surface antigen identified by monoclonal antibody. Br J Haematol. 1985 Sep;61(1):11-20.

\*Leukocyte Typing III., McMichael A.J. et al. (Eds.), Oxford University Press (1987).

\*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).

\*Favaloro EJ, Browning T, Facey D: CD13 (GP150; aminopeptidase-N): predominant functional activity in blood is localized to plasma and is not cell-surface associated. Exp Hematol. 1993 Dec;21(13):1695-701.

\*Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995). \*McCormack E, Mujic M, Osdal T, Bruserud O, Gjertsen BT: Multiplexed mAbs: a new strategy in preclinical time-domain imaging of acute myeloid leukemia. Blood. 2013 Feb 14;121(7):e34-42. doi: 10.1182/blood-2012-05-429555.

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.