

TECHNICAL DATA SHEET

CyFlow™ CD13 Low Endotoxin Anti-Hu; Clone WM15

REF BV941154

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD13
Alternative Names	APN, gp150
Clone	WM15
Clonality	monoclonal
Format	Low Endotoxin
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Human AML cells

Specificity

The mouse monoclonal antibody WM15 recognizes the human CD13 cell surface glycoprotein, a 150 kDa molecule expressed on granulocytes, endothelial cells, epithelial cells and myeloid progenitors.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Immunohistochemistry (frozen sections)
- Functional assays

Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH $\approx$ 7.4; 0.2 μ m filter sterilized. Endotoxin level is less than 0.01 EU/ μ g of the protein, as determined by the LAL test.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD13 (APN; aminopeptidase N) 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.

References

- 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. < PMID: 3865147 >
- 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):44136. < PMID: 4052321 >
- McMichael AJ, Beverley PCL, Cobbold S, et al. (Eds): Leucocyte Typing III, White Cell Differentiation Antigens. Oxford University Press, Oxford. 1987; 1-1050. < NLM ID: 8913266 >
- Knapp W, Dorken B, Gilks W, Rieber EP, Schmidt RE, Stein H, von dem Borne AEGK (Eds): Leucocyte Typing IV. Oxford University Press, Oxford. 1989; 1-1820. < NLM ID: 8914679 >

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- 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. < PMID: 7902291 >
- Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr; 46(4):334-6. < PMID: 7684403 >
- 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. < PMID: 16818694 >
- Petrovic N, Schacke W, Gahagan JR, O'Connor 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. < PMID: 17363739 >
- 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. < PMID: 17655775 >
- McCormack E, Mujić M, Osdal T, Bruserud Ø, Gjertsen BT: Multiplexed mAbs: a new strategy in preclinical time-domain imaging of acute myeloid leukemia. Blood. 2013 Feb 14; 121(7):e34-42. < PMID: 23243270 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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