EXBIO Antibodies

PRODUCT DATA SHEET

11-396-C100

# Monoclonal Antibody to CD13 Purified Antibody (0.1 mg)

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| **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.<br>HLDA III; WS Code M 213<br>HLDA IV; WS Code M 44<br>HLDA IV; WS Code M 209<br>HLDA V; WS Code M MA191 |
| **Regulatory Status:** | RUO |
| **Immunogen:** | Human AML cells |
| **Species Reactivity:** | Human, Non-Human Primates |
| **Application:** | Flow Cytometry<br>Recommended dilution:5 µg/ml<br>Immunoprecipitation<br>Immunohistochemistry (frozen sections)<br>Functional Application<br>The antibody WM15 inhibits infection of cells by human coronavirus and inhibits aminopeptidase N activity of the CD13 molecule immunoprecipitates. |
| **Purity:** | > 95% (by SDS-PAGE) |
| **Purification:** | Purified by protein-A affinity chromatography |
| **Concentration:** | 1 mg/ml |
| **Storage Buffer:** | Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4 |
| **Storage / Stability:** | Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label. |
| **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. |

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

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**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.





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