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## **Datasheet**

## ANPEP monoclonal antibody, clone WM15

Catalog Number: MAB3827

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody

raised against native ANPEP.

Clone Name: WM15

Immunogen: Native purified ANPEP from human AML

cell.

Host: Mouse

Theoretical MW (kDa): 150

Reactivity: Human

Applications: EIA, Flow Cyt, IHC-Fr, IP

(See our web site product page for detailed applications

information)

Protocols: See our web site at

http://www.abnova.com/support/protocols.asp or product

page for detailed protocols

**Specificity:** This antibody recognizes the human CD13 cell surface glycoprotein, a 150 KDa molecule expressed on granulocytes, endothelial cells, epithelial cells and

myeloid progenitors.

Form: Liquid

Isotype: IgG1

Recommend Usage: The optimal working dilution

should be determined by the end user.

Storage Buffer: In PBS, pH 7.4 (0.09% sodium azide)

**Storage Instruction:** Store at 4°C. Do not freeze. Aliquot to avoid repeated freezing and thawing.

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Gene Symbol: ANPEP

Gene Alias: APN, CD13, LAP1, PEPN, gp150, p150

Gene Summary: Aminopeptidase N is located in the small-intestinal and renal microvillar membrane, and also in other plasma membranes. In the small intestine aminopeptidase N plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. Its function in proximal tubular epithelial cells and other cell types is less clear. The large extracellular carboxyterminal domain contains a pentapeptide consensus sequence characteristic of zinc-binding members of the metalloproteinase superfamily. Sequence comparisons with known enzymes of this class showed that CD13 and aminopeptidase N are identical. The latter enzyme was thought to be involved in the metabolism of regulatory peptides by diverse cell types, including small intestinal and renal tubular epithelial cells, macrophages, granulocytes, and synaptic membranes from the CNS. Human aminopeptidase N is a receptor for one strain of human coronavirus that is an important cause of upper respiratory tract infections. Defects in this gene appear to be a cause of various types of leukemia or lymphoma. [provided by RefSeq]

## References:

- Inhibition of APN/CD13 leads to suppressed progressive potential in ovarian carcinoma cells.
  Terauchi M, Kajiyama H, Shibata K, Ino K, Nawa A, Mizutani S, Kikkawa F. BMC Cancer. 2007 Jul 27;7:140.
- 2. CD13/APN regulates endothelial invasion and filopodia formation. Petrovic N, Schacke W, Gahagan JR, O'Conor CA, Winnicka B, Conway RE, Mina-Osorio P, Shapiro LH. Blood. 2007 Jul 1;110(1):142-50. Epub 2007 Mar 15.
- 3. Clinical significance of aminopeptidase N in non-small cell lung cancer. Tokuhara T, Hattori N, Ishida H, Hirai T, Higashiyama M, Kodama K, Miyake M. Clin Cancer Res. 2006 Jul 1;12(13):3971-8.