

ANPEP monoclonal antibody, clone WM15

Catalog # MAB3827 Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against native ANPEP.
Immunogen	Human AML cell.
Host	Mouse
Theoretical MW (kDa)	150
Reactivity	Human
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.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunohistochemistry (Frozen sections)
- Immunoprecipitation
- Enzyme Immunoassay

- Flow Cytometry

Gene Info — ANPEP

Entrez GeneID	290
Gene Name	ANPEP
Gene Alias	APN, CD13, LAP1, PEPN, gp150, p150
Gene Description	alanyl (membrane) aminopeptidase
Omim ID	151530
Gene Ontology	Hyperlink
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 members of the zinc-binding 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]
Other Designations	OTTHUMP00000194690 aminopeptidase M aminopeptidase N membrane alanine aminopeptidase microsomal aminopeptidase

Publication Reference

- [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; 7:140.

Application: IHC-P, Human, Human epithelial ovarian carcinoma tissues

- [CD13/APN regulates endothelial invasion and filopodia formation.](#)

Petrovic N, Schacke W, Gahagan JR, O'Connor CA, Winnicka B, Conway RE, Mina-Osorio P, Shapiro LH.
Blood 2007 Mar; 110(1):142.

- [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.

Clinical Cancer Research 2006 Jul; 12(13):3971.

Application: IHC-P, Flow Cyt, Human, Human non-small cell lung cancer, NSCLC cell lines

Pathway

- [Glutathione metabolism](#)
- [Hematopoietic cell lineage](#)
- [Metabolic pathways](#)
- [Renin-angiotensin system](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Hypertension](#)
- [Lung Neoplasms](#)
- [Tobacco Use Disorder](#)