

ANPEP monoclonal antibody, clone 22A5 (FITC)

Catalog # MAB6038 Size 100 Reactions

Specification	
Product Description	Mouse monoclonal antibody raised against ANPEP.
Immunogen	Cell suspension containing osteoclasts from human osteoclastomas.
Host	Mouse
Reactivity	Human
Specificity	Specificity human CD13
Form	Liquid
Conjugation	FITC
Isotype	lgG2a
Recommend Usage	Flow Cytometry (10 ul/10 ⁶ cells) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Immunohistochemistry (Frozen sections)
- Immunoprecipitation
- Flow Cytometry



Gene Info — ANPEP	
Entrez GeneID	<u>290</u>
Gene Name	ANPEP
Gene Alias	APN, CD13, LAP1, PEPN, gp150, p150
Gene Description	alanyl (membrane) aminopeptidase
Omim ID	<u>151530</u>
Gene Ontology	Hyperlink
Gene Summary	Aminopeptidase N is located in the small-intestinal and renal microvillar membrane, and also in ot her 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 carboxyt erminal domain contains a pentapeptide consensus sequence characteristic of members of the zi nc-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 in volved 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 CN S. 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 aminopeptid ase microsomal aminopeptidase

Publication Reference

• <u>T cell responses affected by aminopeptidase N (CD13)-mediated trimming of major histocompatibility complex class II-bound peptides.</u>

Larsen SL, Pedersen LO, Buus S, Stryhn A.

The Journal of Experimental Medicine 1996 Jul; 184(1):183.

• <u>1F7 (CD26)</u>: a marker of thymic maturation involved in the differential regulation of the CD3 and CD2 pathways of human thymocyte activation.

Dang NH, Torimoto Y, Shimamura K, Tanaka T, Daley JF, Schlossman SF, Morimoto C.

Journal of Immunology 1991 Nov; 147(9):2825.



Pathway

- Glutathione metabolism
- Hematopoietic cell lineage
- Metabolic pathways
- Renin-angiotensin system

Disease

- Genetic Predisposition to Disease
- <u>Hypertension</u>
- Lung Neoplasms
- Tobacco Use Disorder