

ANPEP monoclonal antibody, clone 22A5 (Biotin)

Catalog # MAB5509 Size 200 ug

Specification	
Specification	
Product Description	Mouse monoclonal antibody raised against native ANPEP.
Immunogen	Native purified ANPEP from osteoclastomas.
Host	Mouse
Reactivity	Human
Specificity	Recognizes the (Mr 150-170KDa) cell surface glycoprotein expressed in a pan-myeloid fashion. This antibody also reacts with osteoclasts in giant cell tumors of bone (osteoclastoma), clear cell chondro sarcoma and aneurysmal bone cysts. The CD13 antigen is present on most cells of myeloid origin, in cluding granulocytes and monocytes in normal peripheral blood. CD13 is not expressed on B-cells, T -cells, platelets or erythrocytes. Expression of this antigen is greater on monocytes than on granulocyt es.
Form	Liquid
Conjugation	Biotin
Isotype	lgG
Recommend Usage	Flow Cytometry (using 1 ug to stain 1 \times 10 ⁶ cells) The optimal working dilution should be determined by the end user.
Storage Buffer	In 10 mM PBS, 2 mM EDTA, pH 7.2 (1% BSA, 0.09% sodium azide)
Storage Instruction	Store at 4°C. Do not freeze.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Immunohistochemistry



Flow Cytometry

Gene Info — ANPEP	
Entrez GenelD	<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	<u>Hyperlink</u>
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

 Monoclonal antibodies to osteoclastomas (giant cell bone tumors): definition of osteoclast-specific cellular antigens.

Horton MA, Lewis D, McNulty K, Pringle JA, Chambers TJ.

Cancer Research 1985 Nov; 45(11 Pt 2):5663.

Pathway

Glutathione metabolism



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

Disease

- Genetic Predisposition to Disease
- Hypertension
- Lung Neoplasms
- Tobacco Use Disorder