



CD13 Monoclonal Antibody

Catalog No	YP-mAb-14049
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ANPEP
Immunogen	Synthesized peptide derived from Aminopeptidase N at AA range: 881-930
Specificity	CD13 Monoclonal Antibody detects endogenous levels of CD13 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Alanyl aminopeptidase;Aminopeptidase M;Aminopeptidase N;ANPEP;AP-M; CD13;APN;PEPN;AP-N;hAPN;Microsomal aminopeptidase;Myeloid plasma membrane glycoprotein CD13;gp150
Observed Band	110kD
Calculated Molecular Weight	110kD
Cell Pathway	Cell membrane ; Single-pass type II membrane protein . Also found as a soluble form. .
Tissue Specificity	Expressed in epithelial cells of the kidney, intestine, and respiratory tract; granulocytes, monocytes, fibroblasts, endothelial cells, cerebral pericytes at the blood-brain barrier, synaptic membranes of cells in the CNS. Also expressed in endometrial stromal cells, but not in the endometrial glandular cells. Found in the vasculature of tissues that undergo angiogenesis and in malignant gliomas and lymph node metastases from multiple tumor types but not in blood vessels of normal tissues. A soluble form has been found in plasma. It is found to be elevated in plasma and effusions of cancer patients.
Function	catalytic activity:Release of an N-terminal amino acid, Xaa- -Yaa- from a peptide, amide or arylamide. Xaa is preferably Ala, but may be most amino acids including Pro (slow action). When a terminal hydrophobic residue is followed by



a prolyl residue, the two may be released as an intact Xaa-Pro dipeptide., cofactor: Binds 1 zinc ion per subunit., disease: Defects in ANPEP may be a cause of various types of leukemia or lymphoma., domain: Amino acids 260-353 are essential to mediate susceptibility to infection with HCoV-229E (in porcine/human chimeric studies) and more specifically amino acids 288-295 (mutagenesis studies)., function: Broad specificity aminopeptidase. Plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. May play a critical role in the pathogenesis of cholesterol gallstone disease. May be involved in the metabol

Background

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

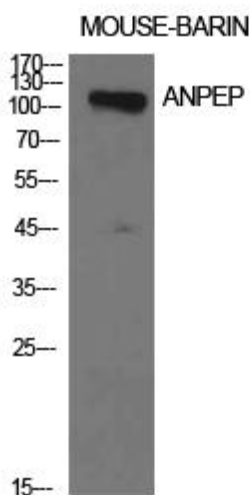
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using CD13 Monoclonal Antibody