

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone APN/514]
Catalog # AH11368

Specification

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide - Product Information

| | |
|-------------------|--|
| Application | ,2,3,4, |
| Primary Accession | P15144 |
| Other Accession | 290 , 1239 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG1, kappa |
| Calculated MW | 150kDa KDa |

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 290

Other Names

Aminopeptidase N, AP-N, hAPN, 3.4.11.2, Alanyl aminopeptidase, Aminopeptidase M, AP-M, Microsomal aminopeptidase, Myeloid plasma membrane glycoprotein CD13, gp150, CD13, ANPEP, APN, CD13, PEPN

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide - Protein Information

Name ANPEP

Synonyms APN, CD13, PEPN

Function

Broad specificity aminopeptidase which plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. Also involved in the processing of various peptides including peptide hormones, such as angiotensin III and IV, neuropeptides, and chemokines. May also be involved the cleavage of peptides bound to major histocompatibility complex class II molecules of antigen presenting cells. May have a role in angiogenesis and promote cholesterol crystallization. May have a role in amino acid transport by acting as binding partner of amino acid transporter SLC6A19 and regulating its activity (By similarity).

Cellular Location

Cell membrane; Single-pass type II membrane protein. Note=Also found as a soluble form

Tissue Location

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.

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide - Images

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide - Background

This MAbs recognizes an extracellular epitope of an integral membrane glycoprotein of 150kDa, identified as CD13. This antigen is present on most cells of myeloid origin including granulocytes, monocytes, mast cells, and GM-progenitor cells. It is also expressed by the majority of AML, CML in myeloid blast crisis, and in a smaller fraction of lymphoid leukemias. It is absent from normal lymphocytes, platelets and erythrocytes. CD13 is also present on fibroblasts; endothelial cells, epithelial cells from renal proximal tubules and intestinal brush border, bone marrow stromal cells, osteoclasts, and cells lining bile duct canaliculi. CD13 is identical to aminopeptidase N (APN), a prominent membrane-bound metalloprotease present on the surface of intestinal brush border and renal tubules. CD13 plays a role in metabolism of biologically active peptides, in phagocytosis, and in bactericidal/tumoricidal activities. It also serves as a receptor for human coronaviruses (HCV). The lineage-restricted pattern of expression of CD13 within the hemopoietic compartment suggests that it may be important in myeloid cell differentiation.

CD13 / Aminopeptidase-N (Myeloid Cell Marker) Antibody - With BSA and Azide - References

Principe S et al. Identification of prostate-enriched proteins by in-depth proteomic analyses of expressed prostatic secretions in urine. *J Proteome Res* 11:2386-96 (2012). | Favalaro EJ et al. The hepatobiliary disease marker serum alanine aminopeptidase predominantly comprises an isoform of the haematological myeloid differentiation antigen and leukaemia marker CD-13/gp150. *Clin Chim Acta* 220:81-90 (1993)