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CD13 Rabbit mAb

Catalog # AP74875

Product Information

Application	WB, IHC-P, IHC-F, IP
Primary Accession	P15144
Reactivity	Rat, Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	109540

Additional Information

Gene ID	290
Other Names	ANPEP
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A IP~~1:10-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

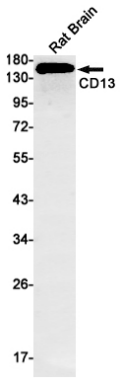
Name	ANPEP
Synonyms	APN, CD13, PEPN
Function	Broad specificity aminopeptidase which plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. Also involved in the processing of various peptides including peptide hormones, such as angiotensin 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.

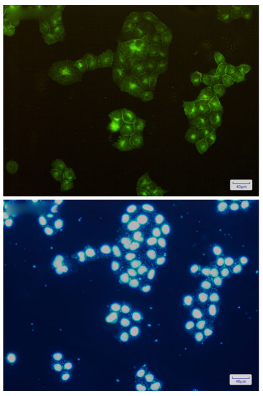
Background

CD13 is a 150-170 kD type II transmembrane glycoprotein also known as aminopeptidase N, APN, and gp150. This zinc metallopeptidase is expressed as a homodimer on granulocytes, myeloid progenitors, endothelial cells, epithelial cells and subset of granular lymphoid cells. It is not expressed on platelets or erythrocytes. CD13 is thought to be involved in the metabolism of many regulatory peptides and functions in antigen processing and the cleavage of chemokines such as MIP-1. CD13 serves as the cellular receptor for Coronavirus.

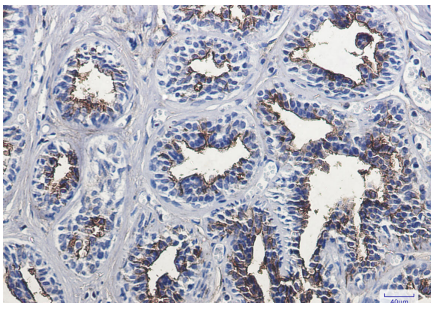
Images



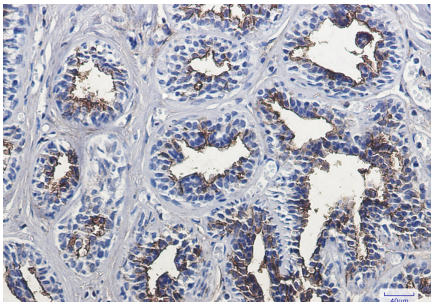
Western blot analysis of CD13 in rat Brain lysates using CD13 antibody.



Immunocytochemistry analysis of CD13(green) in Hela using CD13 antibody,and DAPI(blue)



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using CD13 antibody.
High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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