

## **Product datasheet for CF807396**

#### OriGene Technologies, Inc.

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# CD13 (ANPEP) Mouse Monoclonal Antibody [Clone ID: OTI2F10]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI2F10
Applications: IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:150

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

**Immunogen:** Human recombinant protein fragment corresponding to amino acids 668-967 of human

ANPEP (NP\_001141) produced in E.coli.

**Formulation:** Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** alanyl aminopeptidase, membrane

Database Link: NP 001141

Entrez Gene 290 Human

P15144





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 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, Jul 2008]

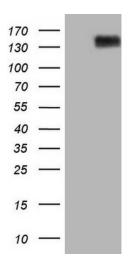
Synonyms: APN; CD13; GP150; LAP1; P150; PEPN

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protease, Transmembrane

**Protein Pathways:** Glutathione metabolism, Hematopoietic cell lineage, Metabolic pathways, Renin-angiotensin

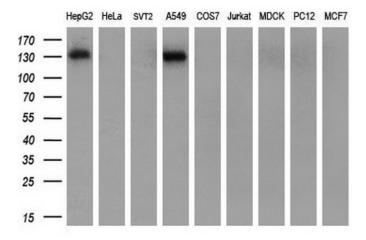
system

### **Product images:**

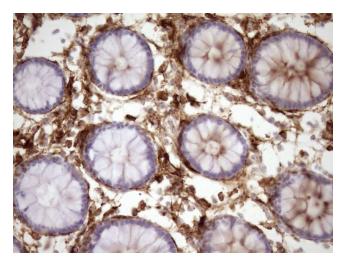


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ANPEP (Cat# [RC208950], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ANPEP (Cat# [TA807396])(1:2000).

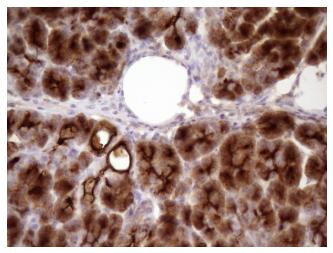




Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ANPEP monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).

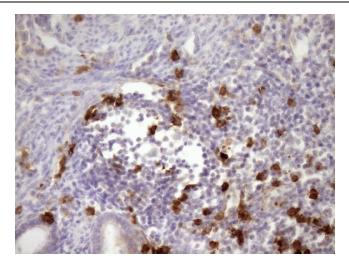


Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-ANPEP mouse monoclonal antibody. (Heat-induced epitope retrieval by Tris-EDTA, pH8.0, [TA807396]) (1:150)

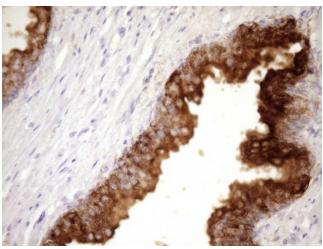


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-ANPEP mouse monoclonal antibody. (Heat-induced epitope retrieval by Tris-EDTA, pH8.0, [TA807396]) (1:150)

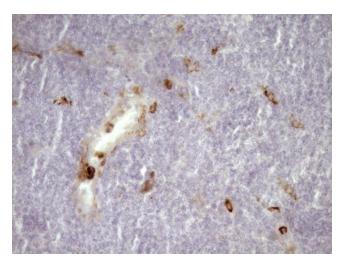




Immunohistochemical staining of paraffinembedded Carcinoma of Human pancreas tissue using anti-ANPEP mouse monoclonal antibody. (Heat-induced epitope retrieval by Tris-EDTA, pH8.0, [TA807396]) (1:150)

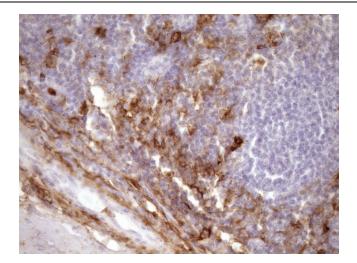


Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-ANPEP mouse monoclonal antibody. (Heat-induced epitope retrieval by Tris-EDTA, pH8.0, [TA807396]) (1:150)

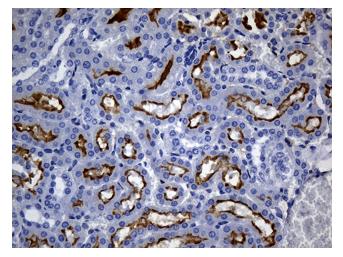


Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-ANPEP mouse monoclonal antibody. (Heat-induced epitope retrieval by Tris-EDTA, pH8.0, [TA807396]) (1:150)





Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-ANPEP mouse monoclonal antibody. (Heat-induced epitope retrieval by Tris-EDTA, pH8.0, [TA807396]) (1:150)



Immunohistochemical staining of paraffinembedded mouse kidney tissue within the normal limits using anti-ANPEP mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA807396]) (1:500)