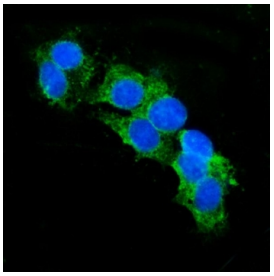
CD13 Antibody / Aminopeptidase N [clone 9G5] (RQ7896)

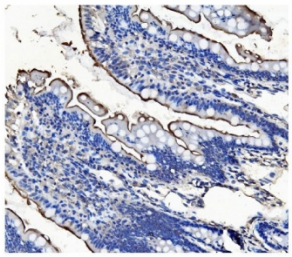
Catalog No.	Formulation	Size
RQ7896	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

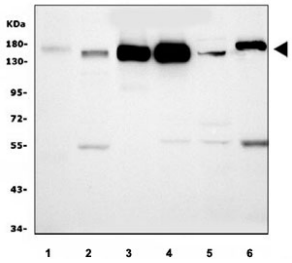
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Monkey
Format	Antigen affinity purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	9G5
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P15144
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence (FFPE) : 5ug/ml
Limitations	This CD13 antibody is available for research use only.



Immunofluorescent staining of FFPE human HepG2 cells with CD13 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC staining of FFPE rat intestine tissue with CD13 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western bot testing of 1) human ThP-1, 2) human PC-3, 3) monkey kidney, 4) rat kidney, 5) rat liver and 6) mouse kidney tissue lysate with CD13 antibody. Expected molecular weight: 110-150 kDa depending on glycosylation level.

Description

Membrane alanyl aminopeptidase (EC 3.4.11.2) also known as alanyl aminopeptidase (AAP) or aminopeptidase N (AP-N) is an enzyme that in humans is encoded by the ANPEP gene. It is mapped to 15q26.1. 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.

Application Notes

Optimal dilution of the CD13 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids D148-S966) was used as the immunogen for the CD13 antibody.

Storage

After reconstitution, the CD13 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.