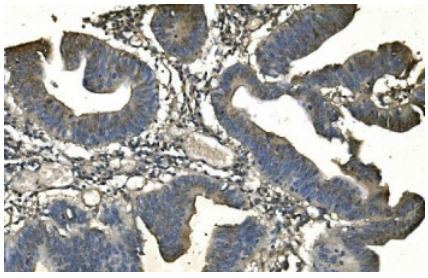
ANPEP Antibody / CD13 Metalloprotease Marker [clone 5B9] (RQ6238)

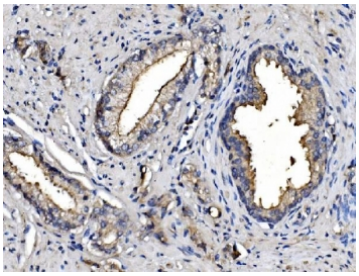
Catalog No.	Formulation	Size
RQ6238	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

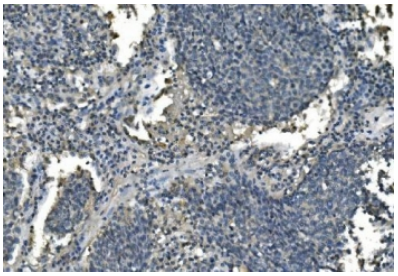
Availability	1-3 business days
Species Reactivity	Human, Rat, Monkey
Format	Antigen affinity purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	5B9
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P15144
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This ANPEP Antibody / CD13 Metalloprotease Marker is available for research use only.



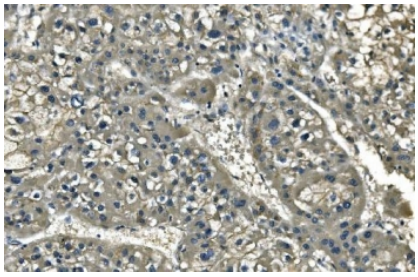
ANPEP Antibody in Human Rectal Cancer IHC. Immunohistochemistry staining of FFPE human rectal cancer tissue with ANPEP Antibody / CD13 Metalloprotease Marker clone 5B9. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling prior to testing. This ANPEP Antibody demonstrates detection of CD13 in human rectal cancer tissue.



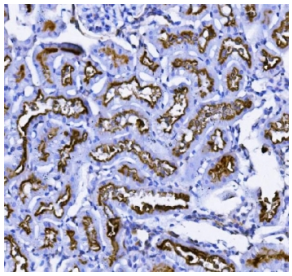
ANPEP Antibody in Human Prostate Cancer IHC. Immunohistochemistry staining of FFPE human prostate cancer tissue with ANPEP Antibody / CD13 Metalloprotease Marker clone 5B9. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling prior to testing. This ANPEP Antibody demonstrates detection of CD13 in human prostate cancer tissue.



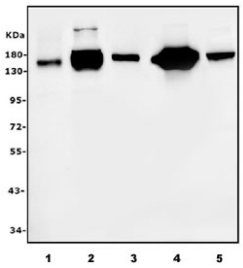
ANPEP Antibody in Human Lung Cancer IHC. Immunohistochemistry staining of FFPE human lung cancer tissue with ANPEP Antibody / CD13 Metalloprotease Marker clone 5B9. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling prior to testing. This ANPEP Antibody demonstrates detection of CD13 in human lung cancer tissue.



ANPEP Antibody in Human Liver Cancer IHC. Immunohistochemistry staining of FFPE human liver cancer tissue with ANPEP Antibody / CD13 Metalloprotease Marker clone 5B9. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling prior to testing. This ANPEP Antibody demonstrates detection of CD13 in human liver cancer tissue.



ANPEP Antibody in Rat Kidney IHC. Immunohistochemistry staining of FFPE rat kidney tissue with ANPEP Antibody / CD13 Metalloprotease Marker clone 5B9. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA for 20 min followed by cooling prior to testing. This ANPEP Antibody demonstrates detection of CD13 in rat kidney tissue.



ANPEP Antibody in Human, Monkey and Rat WB. Western blot testing of 1) human THP-1, 2) human PC-3, 3) monkey kidney, 4) rat kidney and 5) rat liver lysates with ANPEP Antibody / CD13 Metalloprotease Marker clone 5B9. CD13 is expected at approximately 110-150 kDa depending on glycosylation level. The broad molecular weight range is consistent with extensive glycosylation of mature ANPEP/CD13. This ANPEP Antibody demonstrates detection of CD13 across human, monkey and rat samples.

Description

ANPEP Antibody / CD13 Metalloprotease Marker recognizes aminopeptidase N, a cell surface zinc-dependent metalloprotease encoded by the ANPEP gene. The protein is also widely known as CD13, aminopeptidase N (APN) and alanyl aminopeptidase. ANPEP removes N-terminal amino acids from peptides and contributes to peptide processing and metabolism. It is expressed in numerous tissues and cell types, with prominent expression associated with intestinal and renal epithelial cells as well as monocytes, granulocytes and other myeloid populations.

CD13/ANPEP is a type II transmembrane glycoprotein with a large extracellular catalytic domain containing a characteristic zinc-binding metalloprotease motif. In the small intestine, aminopeptidase N participates in the final digestion of peptides generated by gastric and pancreatic proteases. Expression in renal proximal tubular epithelial cells and other tissues reflects the broader distribution and biological functions of this membrane-associated enzyme. Extensive glycosylation of mature CD13 contributes to its characteristic apparent molecular weight of approximately 110-150 kDa.

In addition to its enzymatic activity, ANPEP/CD13 has been investigated in cell adhesion, migration, angiogenesis, immune regulation and cancer biology. CD13 is an established myeloid-associated surface antigen and is expressed in

several hematologic malignancies, while its distribution in epithelial and tumor tissues has expanded its usefulness beyond hematopoietic research. An ANPEP Antibody can therefore support studies examining the expression and tissue distribution of this multifunctional cell surface protein.

This mouse monoclonal antibody was generated using recombinant human ANPEP protein corresponding to amino acids 148-966. It is validated for Western blot and immunohistochemistry and demonstrates reactivity with human, rat and monkey samples. NSJ Bioreagents provides this ANPEP Antibody for research into CD13 expression, peptide metabolism and related cellular processes. A CD13 Metalloprotease Marker can support studies of this membrane-associated aminopeptidase in normal and disease tissues.

For additional information and reagents targeting this cell surface metalloprotease and myeloid marker, visit our CD13 Antibody / Myeloid Cell Marker page.

Application Notes

Optimal dilution of the ANPEP Antibody / CD13 Metalloprotease Marker should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids D148-S966) was used as the immunogen for the ANPEP antibody.

Storage

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

Alternate Names

ANPEP antibody, CD13 antibody, aminopeptidase N antibody, alanyl aminopeptidase antibody, membrane alanyl aminopeptidase antibody, APN antibody

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