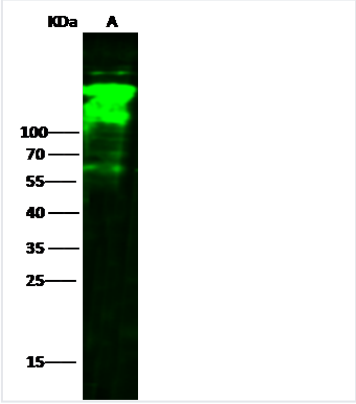
ANPEP Antibody – Rabbit Monoclonal

PRODUCT OVERVIEW

Product Name	CD13 (ANPEP), Monoclonal Antibody
Full Product Name	Recombinant Anti-CD13 Antibody, Rabbit Monoclonal
Product Gene Name	anti-ANPEP antibody
Product Synonym Names	CD13/ANPEP Antibody, Rabbit MAb; alanyl (membrane) aminopeptidase; Anti-APN Antibody; Anti-CD13 Antibody; Anti-GP150 Antibody; Anti-LAP1 Antibody; Anti-P150 Antibody; Anti-PEPN Antibody
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	123
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid; 0.2um filtered solution in PBS
Purity/Purification	Protein A
Specificity	Human CD13/ANPEP
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Molecular Weight	109,540 Da
OMIM	151530
3D Structure	ModBase 3D Structure for P15144
Antibody Type	Recombinant Antibody
Immunogen	Recombinant Human ANPEP protein
Conjugation	Unconjugated
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Human CD13/ANPEP (rh CD13/ANPEP).
Applications Tested/Suitable for anti-ANPEP antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-ANPEP antibody	WB: 1:500-1:2000 ELISA: 1:5000-1:10,000
Related Product Information for anti-ANPEP antibody	Aminopeptidase N (ANPEP or APN), also known as CD13, is a cell-surface metalloprotease located in the small-intestinal and renal microvillar membrane, as well as other plasma membranes. It belongs to the peptidase M1 family. CD13 plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases and is involved in the metabolism of regulatory peptides by diverse cell types. CD13/APN is a potent regulator of angiogenesis which is essential for tumor invasion and metastasis, and its transcription in activated endothelial cells is induced by angiogenic growth factors via the RAS/MAPK pathway. In addition, this enzyme has been shown to participate in antigen processing and presentation, and accordingly, defects in this gene appear to be a cause of various types of leukemia or lymphoma and carcinomas.

Product References and Citations for anti-ANPEP antibody	Pasqualini R, et al. (2000) Aminopeptidase N is a receptor for tumor-homing peptides and a target for inhibiting angiogenesis.Cancer Res. 60(3): 722-7.Mabjeesh SJ, et al. (2005) Aminopeptidase N gene expression and abundance in caprine mammary gland is influenced by circulating plasma peptide. J Dairy Sci. 88(6): 2055-64.Dunkel B, et al. (2009) Neutrophil and platelet activation in equine recurrent airway obstruction is associated with increased neutrophil CD13 expression, but not platelet CD41/61 and CD62P or neutrophil-platelet aggregate formation. Vet Immunol Immunopathol. 131(1-2): 25-32.
Other Notes	Small volumes of anti-ANPEP antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ANPEP purchase	MBS8100455 is an antibody targeting ANPEP. Also known as Recombinant Anti-CD13 Antibody, Rabbit Monoclonal. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-ANPEP antibody
Anti-ANPEP rabbit monoclonal antibody at 1:500 dilutionLane A: U937 Whole Cell LysateLysates/proteins at 30 ug per lane.SecondaryGoat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution.Developed using the Odyssey technique. Performed under reducing conditions.Predicted band size:110 kDaObserved band size:140 kDa

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ANPEP. It may not necessarily be applicable to this product.

NCBI GI #	157266300
NCBI GeneID	290
NCBI Accession #	NP_001141.2
UniProt Primary Accession #	P15144
UniProt Secondary Accession #	Q16728; Q6GT90; Q8IUK3; Q8IVH3; Q9UCE0
UniProt Related Accession #	P15144
GenBank Nucleotide #	NM_001150.2
NCBI Official Full Name	aminopeptidase N
NCBI Official Synonym Full Names	alanyl (membrane) aminopeptidase
NCBI Official Symbol	ANPEP
NCBI Official Synonym Symbols	APN; CD13; LAP1; P150; PEPN; GP150
UniProt Protein Name	Aminopeptidase N
UniProt Synonym Protein Names	Alanyl aminopeptidase; Aminopeptidase M; AP-M; Microsomal aminopeptidase; Myeloid plasma membrane glycoprotein CD13; gp150
Protein Family	Aminopeptidase
UniProt Gene Name	ANPEP

UniProt Synonym Gene Names	APN; CD13; PEPN; AP-N; hAPN; AP-M
UniProt Entry Name	AMPN_HUMAN
NCBI Protein Information	aminopeptidase N; AP-M; AP-N; hAPN; aminopeptidase M; alanyl aminopeptidase; microsomal aminopeptidase; myeloid plasma membrane glycoprotein CD13
NCBI Summary for ANPEP	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]
UniProt Comments for ANPEP	CD13: Broad specificity aminopeptidase. Plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. May play a critical role in the pathogenesis of cholesterol gallstone disease. May be involved in the metabolism of regulatory peptides of diverse cell types including small intestinal and tubular epithelial cells, macrophages, granulocytes and synaptic membranes from the CNS. Found to cleave antigen peptides bound to major histocompatibility complex class II molecules of presenting cells and to degrade neurotransmitters at synaptic junctions. Is also implicated as a regulator of IL-8 bioavailability in the endometrium, and therefore may contribute to the regulation of angiogenesis. Is used as a marker for acute myeloid leukemia and plays a role in tumor invasion. In case of human coronavirus 229E (HCoV-229E) infection, serves as receptor for HCoV-229E spike glycoprotein. Mediates as well human cytomegalovirus (HCMV) infection. Belongs to the peptidase M1 family. Protein type: Receptor, misc.; EC 3.4.11.2; Other Amino Acids Metabolism - glutathione; Membrane protein, integral; Protease Chromosomal Location of Human Ortholog: 15q25-q26 Cellular Component: extracellular space; lysosomal membrane; integral to plasma membrane; ER-Golgi intermediate compartment; cytosol; external side of plasma membrane Molecular Function: viral receptor activity; zinc ion binding; metallopeptidase activity; receptor activity; aminopeptidase activity Biological Process: entry of virus into host cell; cellular protein metabolic process; angiogenesis; angiotensin maturation; cell differentiation; proteolysis
Research Articles on ANPEP	**1.** CD13 participates in phagocytic processes in dendritic cells and macrophages.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/monoclonal-anpep-human-antibody/cd13/8100455