

Full-Length

ANPEP (Human) Recombinant Protein (P01)

Catalog # H00000290-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ANPEP full-length ORF (NP_001141.1, 1 a.a. - 967 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAKGFYISKSLGILGILLGVAAVCTIALSVVYSQEKNKNANSSPVASTTPSASATTNPASATTLDQS
KAWNRYRLPNTLKPDSYQVTLRPYLTPNDRGLVFKGSSTVRFTCKEATDVIIHSKKNYTLSSQGH
RVVLRGVGGSQPPDIDKTELVEPTEYLVVHLKGSLVKDSQYEMDSEFEGELADDLAGFYRSEYM
EGNVRKVVATTQMQAADARKSFPCFDEPAMKAEFNITLIHPKDLTALSNMLPKGPSTPLPEDPN
WNVTEFHTTPKMSTYLLAFVSEFDYVEKQASNGVLIRIWARPSAIAAGHGDYALNVTGPILNFFAG
HYDTPYPLPKSDQIGLPDFNAGAMENWGLVTYRENSLLFDPLSSSSSNKERVVTVIAHELAHQWF
GNLVTIEWWNDLWLNEGFASYVEYLADYAEPTWNLKDLMLVNDVYRVMVDALASSHPLSTPA
SEINTPAQISELFDAYSISYKASVLRMLSSFLSEDVFKQGLASYLHTFAYQNTYLNLDHLEAVN
NRSIQLPTTVRDIMNRWTLQMGFPVITVDTSTGTLSQEHFLDPDSNVTRPSEFNYYWVPITSIRDG
RQQQDYWLIDVRAQNDLFSTSGNEWVLLNLNVTGYRVNYDEENWRKIQTQLQRDHSAPVINRA
QIINDAFNLASAHKVPVTLALNNTLFLIEERQYMPWEAALSSLSYFKLMFDRSEVYGPMMKNYLKKQ
VTPLFIHFRNNTNNWREIPENLMDQYSEVNAISTACSNGVPECEEMVSGLFKQWMENPNNNPIHP
NLRSTVYCNAIAQGGEEWDFAWQFRNATLVNEADKLRAALACSKELWILNRYLSYTLNPDILRK
QDATSTISITNNVIGQGLVWDFVQSNWKKLFNDYGGGSFSSNLIQAVTRRFSTEYELQQLEQFKK
DNEETGFGSGTRALEQALEKTKANIKWVKENKEVVLQWFTENSK

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

135.9

Interspecies Antigen Sequence

Mouse (76); Rat (78)

Preparation Method[in vitro wheat germ expression system](#)**Purification**

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ANPEP

Entrez GeneID[290](#)**GeneBank Accession#**[NM_001150.1](#)**Protein Accession#**[NP_001141.1](#)**Gene Name**

ANPEP

Gene Alias

APN, CD13, LAP1, PEPN, gp150, p150

Gene Description

alanyl (membrane) aminopeptidase

Omim ID[151530](#)**Gene Ontology**[Hyperlink](#)

Gene Summary

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]

Other Designations

OTTHUMP00000194690|aminopeptidase M|aminopeptidase N|membrane alanine aminopeptidase|microsomal aminopeptidase

Pathway

- [Glutathione metabolism](#)
- [Hematopoietic cell lineage](#)
- [Metabolic pathways](#)
- [Renin-angiotensin system](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Hypertension](#)
- [Lung Neoplasms](#)
- [Tobacco Use Disorder](#)