

Recombinant mouse Aminopeptidase N/CD13 protein

Catalog Number: ATGP3925

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

33-966aa

UniProt No.

P97449

NCBI Accession No.

NP_032512

Alternative Names

Anpep, AP-M, AP-N, Apn, Cd13, P150, mAPN, Alanyl aminopeptidase, Aminopeptidase M, Membrane protein p161, Microsomal aminopeptidase, CD13, Lap-1, Lap1, aminopeptidase N

PRODUCT SPECIFICATION

Molecular Weight

107.5 kDa (943aa)

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 4,000pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1pmole of H-Ala-AMC to Alanine and AMC per minute at pH7.5 at 25C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

Anpep, also known as aminopeptidase N, is located in the small-intestinal and renal microvillar membrane, and also in other plasma membranes. It plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. This protein is also involved in the processing of various peptides including peptide hormones, such as angiotensin III and IV, neuropeptides, and chemokines. It has a role in angiogenesis and promote cholesterol crystallization and in amino acid transport by acting as binding partner of amino acid transporter SLC6A19 and regulating its activity. Recombinant mouse Anpep, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

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<ADP>YAQEKNR NAENSATAPT LPGSTSATTA TTPPAVDESK PWNQYRLPKT LIPDSYRVIL RPYLTPNNQG LYIFQGNSTV  
RFTCNQTTDV IIIHKKLNY TLKGNHRVVL RTLDGTPAPN IDKTELVERT EYLVVHLQGS LVEGRQYEMD SQFQELADD  
LAGFYRSEYM EGDVKKVAT TQMQAADARK SFPCFDEPAM KAMFNITLIY PNNLIALSNM LPKESKPYPE DPSCTMTEFH  
STPKMSTYLL AYIVSEFKNI SSVSANGVQI GIWARPSAID EGQGDYALNV TGPILNFFAQ HYNTSYPLPK SDQIALPDFN  
AGAMENWGLV TYRESSLVFD SQSSSISNKE RVVTVIAHEL AHQWFGNLVT VAWWNDLWLN EGFASYVEYL GADYAAPTWN  
LKDLMLVNDV YRMAVDALA SSHPLSSPAD EIKTPDQIME LFDSITYSKG ASVIRMLSSF LTEDLFKKGL SSYLHTYQYS  
NTVYLDLWEH LQKAVNQQTAVQPPATVRTI MDRWILQMGF PVITVNTNTG EISQKHFLLD SKSNVTRPSE FNYIWIPIPI  
FLKSGQEDHY WLDVEKNQSA KFQTSSENEI LLNINVTGYG LVNYDENNWK KLQNQLQTDL SVIPVINRAQ IHDSEFNLAS  
AKMIPITLAL DNTLFLVKEA EYMPWQAALS SLNYFTLMFD RSEVYGPMPK YLKKQVTPLF FYFQNRNTNW VNRPPTLMEQ  
YNEINAISTA CSSGLKECRD LVVELYSQWM KNPNNNTIHP NLRSTVYCNA IAFGGEEENW FAWEQFRNAT LVNEADKLRS  
ALACSKDVWI LNRYLSYTLN PDYIRKQDTT STIISIASNV AGHPLVWDFV RSNWKKLFEN YGGGSFSFAN LIQGVTRRFS  
SEFELQLEQ FKADNSATGF GTGTRALEQA LEKTRANIDW VKENKDAVFK WFTENSS<HHH HHH>
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General References

Azimi A., et al. (2017) Cell Death Dis. 8:e3029.
Sørensen KD., et al. (2013) Br J Cancer. 108:420-428.

DATA

SDS-PAGE

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3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

