

Aminopeptidase N/APN Protein, Human (I603M, HEK293, His)

Cat. No.:	HY-P72881
Synonyms:	Aminopeptidase N; AP-N; Hapn; AP-M; CD13; ANPEP; PEPN
Species:	Human
Source:	HEK293
Accession:	P15144/NP_001141.2 (K69-K967, I603M)
Gene ID:	290
Molecular Weight:	135-140 kDa

PROPERTIES

AA Sequence

K A W N R Y R L P N	T L K P D S Y R V T	L R P Y L T P N D R	G L Y V F K G S S T
V R F T C K E A T D	V I I I H S K K L N	Y T L S Q G H R V V	L R G V G G S Q P P
D I D K T E L V E P	T E Y L V V H L K G	S L V K D S Q Y E M	D S E F E G E L A D
D L A G F Y R S E Y	M E G N V R K V V A	T T Q M Q A A D A R	K S F P C F D E P A
M K A E F N I T L I	H P K D L T A L S N	M L P K G P S T P L	P E D P N W N V T E
F H T T P K M S T Y	L L A F I V S E F D	Y V E K Q A S N G V	L I R I W A R P S A
I A A G H G D Y A L	N V T G P I L N F F	A G H Y D T P Y P L	P K S D Q I G L P D
F N A G A M E N W G	L V T Y R E N S L L	F D P L S S S S S N	K E R V V T V I A H
E L A H Q W F G N L	V T I E W W N D L W	L N E G F A S Y V E	Y L G A D Y A E P T
W N L K D L M V L N	D V Y R V M A V D A	L A S S H P L S T P	A S E I N T P A Q I
S E L F D A I S Y S	K G A S V L R M L S	S F L S E D V F K Q	G L A S Y L H T F A
Y Q N T I Y L N L W	D H L Q E A V N N R	S I Q L P T T V R D	I M N R W T L Q M G
F P V I T V D T S T	G T L S Q E H F L L	D P D S N V T R P S	E F N Y V W I V P I
T S I R D G R Q Q Q	D Y W L M D V R A Q	N D L F S T S G N E	W V L L N L N V T G
Y Y R V N Y D E E N	W R K I Q T Q L Q R	D H S A I P V I N R	A Q I I N D A F N L
A S A H K V P V T L	A L N N T L F L I E	E R Q Y M P W E A A	L S S L S Y F K L M
F D R S E V Y G P M	K N Y L K K Q V T P	L F I H F R N N T N	N W R E I P E N L M
D Q Y S E V N A I S	T A C S N G V P E C	E E M V S G L F K Q	W M E N P N N N P I
H P N L R S T V Y C	N A I A Q G G E E E	W D F A W E Q F R N	A T L V N E A D K L
R A A L A C S K E L	W I L N R Y L S Y T	L N P D L I R K Q D	A T S T I I S I T N
N V I G Q G L V W D	F V Q S N W K K L F	N D Y G G G S F S F	S N L I Q A V T R R
F S T E Y E L Q Q L	E Q F K K D N E E T	G F G S G T R A L E	Q A L E K T K A N I
K W V K E N K E V V	L Q W F T E N S K		

Biological Activity Measured by its ability to cleave the fluorogenic peptide substrate Ala-7-amido-4-methylcoumarin (Ala-AMC) and the specific activity is >2,500 pmoles/min/μg.

Appearance Lyophilized powder.

Formulation Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.3. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.

Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Aminopeptidase N/APN protein is a broad specificity aminopeptidase that functions as a homotrimer connected by disulfide bonds. It plays a crucial role in the final digestion of peptides derived from protein hydrolysis by gastric and pancreatic proteases. Moreover, it is involved in the processing of various peptides, including peptide hormones like angiotensin III and IV, neuropeptides, and chemokines. Additionally, it may participate in the cleavage of peptides bound to major histocompatibility complex class II molecules in antigen presenting cells. This protein may also contribute to angiogenesis and promote cholesterol crystallization. Furthermore, it acts as a binding partner of the amino acid transporter SLC6A19, potentially regulating its activity and impacting amino acid transport. Notably, Aminopeptidase N/APN protein acts as a receptor for human coronavirus 229E/HCoV-229E, particularly serving as a receptor for the spike glycoprotein of HCoV-229E during infection.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA