RP00188
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Recombinant Human Aminopeptidase N/APN/CD13 Protein

Catalog No.: RP00188 Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	290	P15144

Tags
C-His

Synonyms
ANPEP; APN; CD13; GP150; LAP1; P150; PEPN; aminopeptidase N;APN;CD13;GP150;LAP1;P150;PEPN; AP-M; AP-N; hAPN

Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE.

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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Background

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.

Basic Information

Description
Recombinant Human Aminopeptidase N/APN/CD13 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Lys69-Lys967) of human ANPEP/CD13 (Accession #NP_001141.2) fused with an 8×His tag at the C-terminus.

Bio-Activity
Measured by its ability to cleave the fluorogenic peptide substrate, Ala-7-amido-4-methylcoumarin (Ala-AMC). The specific activity is >4300 pmol/min/μg.

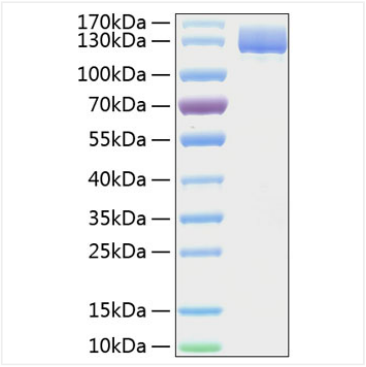
Shipping
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human Aminopeptidase N/APN/CD13 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.