

## HUMAN ANPEP PROTEIN, HIS TAG

**Cat.#:** 11594

**Product Name:** Human ANPEP Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** APN;CD13;GPI50;LAP1;P150;PEPN

**Target:** ANPEP

**UNIPROT ID:** P15144

**Description:** Recombinant human ANPEP protein with C-terminal 6xHis tag

**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. This membrane-bound zinc metalloprotease is known to serve as a receptor for the HCoV-229E alphacoronavirus as well as other non-human coronaviruses. This gene has also been shown to promote angiogenesis, tumor growth, and metastasis and defects in this gene are associated with various types of leukemia and lymphoma.

[provided by RefSeq, Apr 2020]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 103.6 kDa after removal of the signal peptide. The apparent molecular mass of ANPEP-His is approximately 130–250 kDa due to glycosylation.

**Molecular Characterization:** ANPEP(Lys69–Lys967) 6×His tag

**Purity:** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$  for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at  $-80^{\circ}\text{C}$  (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

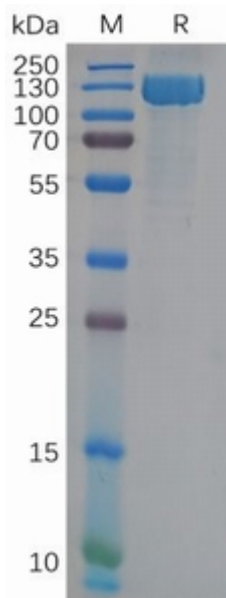


Figure 1. Human ANPEP Protein, His Tag on SDS-PAGE under reducing condition.