

Recombinant Protein Technical Manual Recombinant Mouse ANPEP / APN / CD13 Protein (His tag) RPES0353

Product Data:

Product SKU: RPES0353 **Size:** 10μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 032512.2

Protein Information:

Molecular Mass: 104 kDa

AP Molecular Mass: 12030 kDa

Tag: C-His

Bio-activity: Measured by its ability to cleave the fluorogenic peptide substrate, Ala-7-amido-4-

methylcoumarin (Ala-AMC). The specific activity is >800 pmoles/min/μg.

Purity: > 97 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: AP-M;AP-N;Apn;Cd13;P150

Immunogen Information:

Sequence: Lys 66-Ser 966

Background:

Aminopeptidase N (ANPEP or APN), also known as CD13, is a cell-surface metalloprotease located in the small-intestinal and renal microvillar membrane, as well as other plasma membranes. It belongs to the peptidase M1 family. CD13 plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases and is involved in the metabolism of regulatory peptides by diverse cell types. CD13/APN is a potent regulator of angiogenesis which is essential for tumor invasion and metastasis, and its transcription in activated endothelial cells is induced by angiogenic growth factors via the RAS/MAPK pathway. In addition, this enzyme has been shown to participate in antigen processing and presentation, and accordingly, defects in this gene appear to be a cause of various types of leukemia or lymphoma and carcinomas.