Recombinant Protein Technical Manual

Recombinant Human ANPEP/CD13 Protein (603 Met/Ile, His Tag)(Active)

RPES0546

Product Data:

Product SKU: RPES0546

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001141.2

Protein Information:

Molecular Mass:	104.2 kDa
AP Molecular Mass:	13540 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 >2,500 pmoles/min/µg.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.3
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	APN;CD13;GP150;LAP1;P150;PEPN

Immunogen Information:

Sequence: Lys 69-Lys 967, 603 Met/Ile

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.