

## Product datasheet for PH308950

### CD13 (ANPEP) (NM\_001150) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ANPEP MS Standard C13 and N15-labeled recombinant protein (NP_001141)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC208950
Predicted MW:	109.51 kDa
Protein Sequence:	>RC208950 representing NM_001150 Red=Cloning site Green=Tags(s)

MAKGFYISKSLGILGILLGVAAVCTIIALSVVYSQEKKNANSSPVASTTPSASATTNPASATTLDQSKA  
WNRYL PNTLKPDSYQVTLRPYLTPNDRGLYVFKGSSTVRFTCKEATDVIIHSKKLNLYTL SQGHRVVL R  
GVGGSQPPDIDKTELVEPTEYL VVHLKGS LKDSQYEMDSEFEGELADDLAGFYRSEYMEGNVRKV VATT  
QMQAADARKSFPCFDEPAMKAEFNITLIHPKDLTALSNMLPKGPSTPLPEDPNWNVTEFHTTPKMSTYLL  
AFIVSEFDYVEKQASNGV LIRIWARPSAIAAGHGDYALNVTGPILNFFAGHYDTPYPLPKSDQIGLPDFN  
AGAMENWGLVTYRENSLLFDPLSSSSSNKERVVTVIAHEL AHQWFGNLVTIEWWDLWLNEGFASYVEYL  
GADYAEPTWNLKDLMLVNDVYRVMVDALASSHPLSTPASEINTPAQISELFD AISYKSGASVLRMLSSF  
LSEDFVKQGLASYLHTFAYQNTIYLNLDHLEAVNRSIQLPTTVRDMNRWTLQMGFPVITVDTSTGT  
LSQEHFLLDPSNVTRPSEFN YWIVPITSIRDGRQQDYWLIDVRAQNDLFSTSGNEWVLLN LNVTGYY  
RVNYDEENWRKIQTQLQRDHS AIPVINRAQIINDAFNLASAHKVPVTLALNNTLFLIEERQYMPWEAALS  
SLSYFKLMFDRSEVYGP MKNYLKQVTPLF IHFRNNTNWNREIPENLMDQYSEVNAISTACSNVPECEE  
MVSGLFKQWMENPNNNP IHPNLRSTVYCNAIAQGGEEWDF AWEQFRNATLVNEADKLRAALACSKELWI  
LNRYLSYTLNPD LIRKQDATSTIISITNNVIGQGLVWDFVQSNWKKLFNDYGGGSF SFSNLIQAVTRRFS  
TEYELQLEQFKKDNEETGFGSGTRALEQALEKTKANIKWVKENKEVVLQWFTENSK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.



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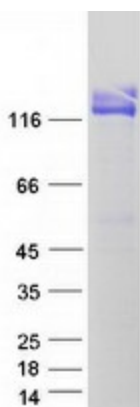
RefSeq:	<a href="#">NP_001141</a>
RefSeq Size:	3494
RefSeq ORF:	2901
Synonyms:	APN; CD13; GP150; LAP1; P150; PEPN
Locus ID:	290
UniProt ID:	<a href="#">P15144</a> , <a href="#">A0A024RC61</a> , <a href="#">Q59E93</a>
Cytogenetics:	15q26.1

**Summary:** 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]

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protease, Transmembrane

**Protein Pathways:** Glutathione metabolism, Hematopoietic cell lineage, Metabolic pathways, Renin-angiotensin system

### Product images:



Coomassie blue staining of purified ANPEP protein (Cat# [TP308950]). The protein was produced from HEK293T cells transfected with ANPEP cDNA clone (Cat# [RC208950]) using MegaTran 2.0 (Cat# [TT210002]).