

Product datasheet for RC208950L1

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CD13 (ANPEP) (NM_001150) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD13 (ANPEP) (NM 001150) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: CD13

Synonyms: APN; CD13; GP150; LAP1; P150; PEPN

Mammalian Cell None

Selection:

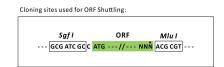
Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

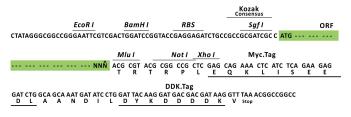
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC208950).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001150

ORF Size: 2901 bp





OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customer.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation:

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 001150.1</u>, <u>NP 001141.1</u>

 RefSeq Size:
 3494 bp

 RefSeq ORF:
 2904 bp

 Locus ID:
 290

 UniProt ID:
 P15144

Cytogenetics: 15q26.1

Domains: Peptidase M1

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

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

system

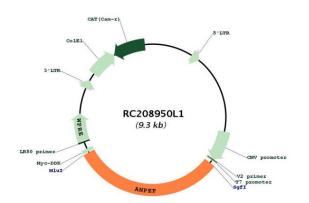
MW: 109.51 kDa



Gene Summary:

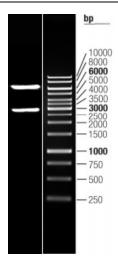
Aminopeptidase N is located in the small-intestinal and renal microvillar membrane, and also in other plasma membranes. In the small intestine aminopeptidase N plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. Its function in proximal 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]

Product images:



Circular map for RC208950L1





Double digestion of RC208950L1 using Sgfl and Mlul $\,$