

Product datasheet for RC222822L1

OriGene Technologies, Inc.

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Ancient ubiquitous protein 1 (AUP1) (NM_181575) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ancient ubiquitous protein 1 (AUP1) (NM_181575) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Ancient ubiquitous protein 1

Mammalian Cell None

Selection:

Vector: pLenti-C-Myc-DDK (PS100064)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

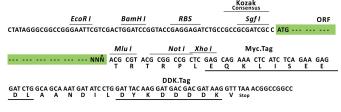
The ORF insert of this clone is exactly the same as(RC222822).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_181575

ORF Size: 1230 bp



Ancient ubiquitous protein 1 (AUP1) (NM_181575) Human Tagged Lenti ORF Clone - RC222822L1

OTI Disclaimer: 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 181575.2</u>

RefSeq Size: 1561 bp RefSeq ORF: 1233 bp

Locus ID: 550

UniProt ID: Q9Y679

Cytogenetics: 2p13.1

Protein Families: Druggable Genome, Transmembrane

MW: 45.6 kDa

Gene Summary: The protein encoded this gene is involved in several pathways including quality control of

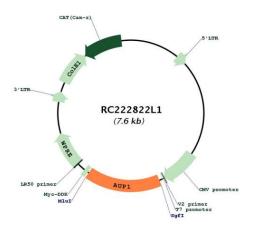
misfolded proteins in the endoplasmic reticulum and lipid droplet accumulation. Lipid droplets are organelles in the cytoplasm that store neutral lipids such as cholesterol esters and trigylycerides to prevent the overabundance of free cholesterol and fatty acids in cells, but also to act as storage for other metabolic processes, such as membrane biogenesis. Reduced expression of this gene results in reduced lipid droplet clustering, a function that is dependent on ubiquitination of the protein. This protein contains multiple domains including a hydrophobic N-terminal domain, an acetyltranferase domain, a ubiquitin-binding CUE

domain, and a UBE2B2-binding domain (G2BR). Alternative splicing results in multiple

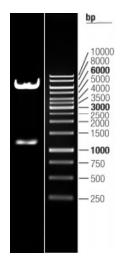
transcript variants. [provided by RefSeq, Nov 2014]



Product images:



Circular map for RC222822L1



Double digestion of RC222822L1 using Sgfl and Mlul $\,$