

Product datasheet for RC222822

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

Product data:

Product Type:	Expression Plasmids
Product Name:	Ancient ubiquitous protein 1 (AUP1) (NM_181575) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ancient ubiquitous protein 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222822 representing NM_181575 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCTTCCTCAGGGCCGGGGCCGGAGCGGCTCTTTGACTCGCACCGGCTTCCGGGTGACTGCTTCC
TACTGCTCGTGTCTGTCTACGCGCCAGTCGGGTTCTGCCTCCTCGTCTGCGCTCTTTCTCGGGAT
CCACGTCTTCTGGTCAGCTGCGCGCTGCCAGACAGCGTCCTTCGCAGATTCGTAGTGCGGACCATGTGT
GCGGTCTAGGGCTCGTGGCCCGCAGGAGGACTCCGGACTCCGGGATCACAGTGTACAGCCCTCTACTCAA
CCAACCATGTGACACCTTTCGACCACAACATAGTCAATTTGCTTACCACCTGTAGCACCCCTCTACTCAA
TAGTCCCCCAGCTTTGTGTGCTGGTCTCGGGGCTTCATGGAGATGAATGGCGGGGGAGTTGGTGGAG
TCACTCAAGAGATTCTGTGCTTCCACGAGGCTTCCCCCACTCCTCTGTGCTATTCCCTGAGGAAGAGG
CCACCAATGGCCGGGAGGGGCTCCTGCGCTTCACTTCTGCGCCATTTTCTATCCAAGATGTGGTACAACC
TCTTACCCTGCAAGTTCAGAGACCCCTGGTCTCTGTGACGGTGTGAGATGCCTCCTGGGTCTCAGAACTG
CTGTGGTCACTTTTCTCCCTTTCACGGTGTATCAAGTAAGGTGGCTTCGTCTGTTCATCGCCAACTAG
GGGAAGCGAATGAGGAGTTTCACTCCGTGTACAACAGCTGGTGGCAAGGAATTGGCCAGACAGGGAC
ACGGCTCACTCCAGCTGACAAAGCAGAGCACATGAAGCGACAAAGACACCCAGATTGCGCCCCAGTCA
GCCAGTCTTCTTCCCTCCCTCCCTGGTCTTCTCCTGATGTGCAACTGGCAACTCTGGCTCAGAGAG
TCAAGGAAGTTTTGCCCATGTGCCATTGGGTGTATCCAGAGAGACCTGGCCAAGACTGGCTGTGTAGA
CTTGACTATCACTAATCTGCTTGAAGGGGCGGTAGCTTTCATGCCTGAAGACATCAACAAGGAACTCAG
TCCCTACCACAGCCTCTGCCTCCAAGTTTCCAGCTCTGGCCCGGTGACCCCTCAGCCAACAGCCCTAA
CATTTGCCAAGTCTTCTGGGCCCGCAGGAGAGCCTGCAGGAGCGCAAGCAAGCAACTATATGAATACGC
AAGAAGGAGATTCACAGAGAGACGAGCCAGGAGGCTGAC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAAGGTTTAA



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Protein Sequence: >RC222822 representing NM_181575
Red=Cloning site Green=Tags(s)

MELPSGPGPERLFDShRLPGDCFLLLVLLL YAPVGFCLLVLRLFLGIHVFLVSCALPDSVLRFRFVVRTMC
 AVLGLVARQEDSGLRDHDSVRVLI SNHVTPFDHNI VNLL TTCSTPLLNSPPSFVCWSRGMEMNGRGE LVE
 SLKRFCASTRLPPTPLLLFPEEEATNGRELLRFSSWPF SIQDVVQPL TLQVQRPLVSVTVSDASWVSEL
 LWSLFVPFTVYQVRWLRPVHRQLGEANEEFALRVQQL VAKELGQTGTRL TPADKAEHMKRQRHPRLRPQS
 AQSSFPPSPGSPDVQLATLAQRVKEVLP HVPLGVIQRDLAKTGCVDLTI TNLLEGAVAFMPEDITKGTQ
 SLPTASASKFPSSGPVTPQPTAL TFAKSSWARQESLQERKQAL YEYARRRFTERRAQEAD

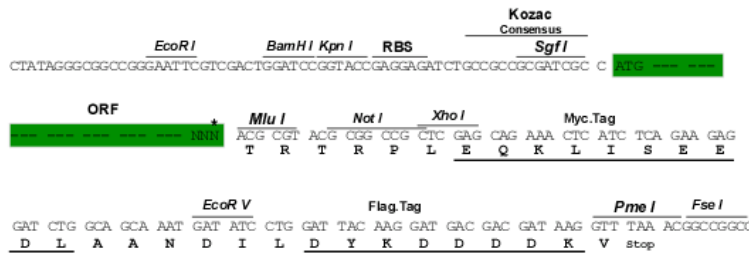
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8046_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_181575

ORF Size: 1230 bp

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: [NM_181575.5](#)

RefSeq Size: 1561 bp

RefSeq ORF: 1233 bp

Locus ID: 550

UniProt ID: [Q9Y679](#)

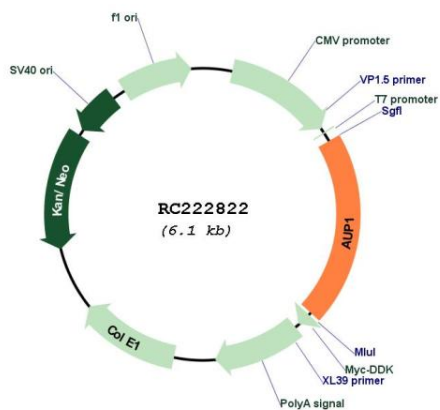
Cytogenetics: 2p13.1

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 triglycerides 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 acetyltransferase 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 RC222822