

## Product datasheet for **RC218161**

### **AP2M1 (NM\_004068) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AP2M1 (NM_004068) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AP2M1
Synonyms:	AP50; CLAPM1; MRD60; mu2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC218161 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGATTGGAGGCTTATTCATCTATAATCACAAAGGGGGAGGTGCTCATCTCCCGAGTCTACCGAGATGACA  
 TCGGGAGGAACGCAGTGGATGCCTTTCGGTCAATGTTATCCATGCCCGCAGCAGGTGCGCAGCCCGT  
 CACCAACATTGCTCGCACCAGCTTCTTCCACGTTAAGCGGTCCAACATTTGGCTGGCAGCAGTACCAAG  
 CAGAATGTCAACGCTGCCATGGTCTTCAATTCCTCTATAAGATGTGTGACGTGATGGTGCCTACTTTG  
 GCAAGATCAGCGAGGAAAACATCAAGAACAATTTGTGCTCATATAGAGCTGCTGGATGAGATTCTAGA  
 CTTTGGCTACCCACAGAATTCGAGACAGGCGCTGAAAACCTTCATCACGCAGCAGGGCATCAAGAGT  
 CAGCATCAGACAAAAGAAGAGCAGTCACAGATCACAGCCAGGTAAGTGGCAGATTGGTGGCGGCGAG  
 AGGGTATCAAGTATCGTCGGAATGAGCTTCTGGATGTGCTGGAGAGTGTGAACCTGCTCATGTCCCC  
 ACAAGGGCAGGTGCTGAGTGCCCATGTGTGGGCGGGTGGTGTGAAGAGCTACCTGAGTGGCATGCCT  
 GAATGCAAGTTTGGGATGAATGACAAGATTGTTATTGAAAAGCAGGGCAAAGGCACAGCTGATGAAACAA  
 GCAAGAGCGGGAAGCAATCAATTGCCATTGATGACTGCACCTCCACCAGTGTGTGCGACTCAGCAAGTT  
 TGAATCTGAACGCAGCATCAGCTTTATCCCGCCAGATGGAGAGTTTGGCTTATGAGGTATCGCACAAAC  
 AAGGACATCATCCTTCCCTTCCGGGTGATCCCGTAGTGCAGAGAAGTGGGACGCACCAAACCTGGAGGTCA  
 AGGTGGTCAAGTCCAACCTTAAACCCTCACTGCTGGCTCAGAAGATCGAGGTGAGGATCCCAACCCC  
 ACTGAACACAAGCGGGTGCAGGTGATCTGCATGAAGGGGAAGGCCAAGTACAAGCCAGCGAGAATGCC  
 ATCGTGTGAAGATCAAGCGCATGGCAGGCATGAAGGAATCGCAGATCAGCGCAGAGATTGAGCTTCTGC  
 CTACCAACGACAAGAAGAAATGGGCTCGACCCCAATTTCCATGAACTTTGAGGTGCCATTCGCGCCCTC  
 TGGCCTCAAGGTGCGCTACTTGAAGGTGTTTGAACCGAAGCTGAACTACAGCGACCATGATGTATCAAA  
 TGGGTGCGCTACATTGGCCGAGTGGCATTATGAAACTCGCTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC218161 protein sequence  
 Red=Cloning site Green=Tags(s)

MIGGLFIYNHKGEVLISRVYRDDIGRNAVDVAFRVNVIHARQQVRSPTNIARTSFFHVKRSNIWLAAVTK  
 QNVNAAMVFEFLYKMCVMAAYFGKISEENIKNNFVLIYELLDEILDFGYPQNSSETGALKTFITQQGIKS  
 QHQTKEEQSQITSQVTGQIGWRREGIKYRRNELFDVLESVNLLMSPQGQVLSAHVSGRVVMKSYLSGMP  
 ECKFGMNDKIVIEKQKGTADETSKSGKQSIADDCTFHQCVRLSKFDSERSISFIPDGEFELMRVRTT  
 KDIILPFRVIPLVREVGRTKLEVKVVIKSNFKPSLLAQKIEVRIPTPLNTSGVQVICMKGKAKYKASENA  
 IVWKIKRMAGMKESQISAEIELLPTNDKKKWARPPISMNFEVVPFAPSGLKVRYLKVFEPKLNYSHDHVIK  
 WVRYIGRSGIYETRC

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6588\\_b11.zip](https://cdn.origene.com/chromatograms/mk6588_b11.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_004068

**ORF Size:** 1305 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 [custsupport@origene.com](mailto:custsupport@origene.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).

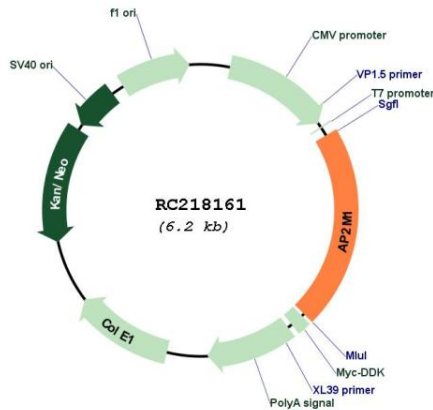
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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:** [NM\\_004068.4](#)

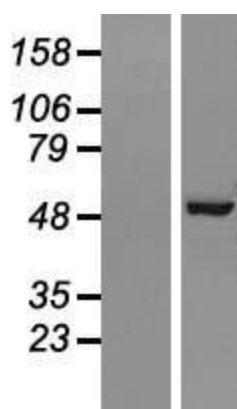
**RefSeq Size:** 1958 bp  
**RefSeq ORF:** 1308 bp  
**Locus ID:** 1173  
**UniProt ID:** [Q96CW1](#)  
**Cytogenetics:** 3q27.1  
**Domains:** Adap\_comp\_sub  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Endocytosis, Huntington's disease  
**MW:** 49.7 kDa

**Gene Summary:** This gene encodes a subunit of the heterotetrameric coat assembly protein complex 2 (AP2), which belongs to the adaptor complexes medium subunits family. The encoded protein is required for the activity of a vacuolar ATPase, which is responsible for proton pumping occurring in the acidification of endosomes and lysosomes. The encoded protein may also play an important role in regulating the intracellular trafficking and function of CTLA-4 protein. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2015]

### Product images:



Circular map for RC218161



Western blot validation of overexpression lysate (Cat# [LY418234]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218161 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).