

Product datasheet for **RR213721**

Ap4m1 (NM_001037977) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ap4m1 (NM_001037977) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ap4m1
Synonyms:	MGC156474
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR213721 representing NM_001037977
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATTTCCAGTCTTCTATTCTGTCTTCCAAGGGGGATCCGCTCATCTATAAAGACTTCCGAGGGGATA
 GTGGTGGTCGTGATGTGGCCGAGCTCTTCTACCGAAGCTGACGGGACTGCCGGGAGCGAGTCCCCGGT
 TGTCAATGTATCACGATGATCGTCAATTTTATTACATCAGACACAGTGGTCTCTATTTGGTGGCCACAAC
 TCAGAAAATGTCTCTCTTTTCCAGCTCCTGGAGCTACTTTCCAGGTTAGCCACTCTCTTGGGTGACTACT
 GTGGCTCACTCAATGAGGGGACCATCTCACGGAATGTGGCGCTTGTCTACGAACTCCTGGATGAAGTGT
 GGATTACGGCTATGTGCAGACTACGTCCACAGACATGCTGAGGAACTTCACTCAAAGTGAAGCCGCGGTC
 AGCAAGCCTTTCCAGCCTCTTCCAGCTCAGCAGCGTCCGCTGTTTGGGGCAGAGACGCAGCAGAACAGAG
 TGGCCCCAAGCAGTGCAGCCAGCCGCCCTGTCTGTCCAGTCTGTTCTGACCAGAGCCAAAAGAATGAAGT
 GTTTTTAGATGTGGTCGAAAGGCTGTCTGTTCTGATTGCATCTAATGGCTCCCTGTTGAAGTGGATGTC
 CAAGGAGAGATCCGGCTCAAGAGCTTCCCTCCAGCAGTCTGAGATATGCATTGGCTTGACAGAAGAAT
 TCTGTGTTGAAAAGTCAAGACTGAGAGGTTATGGGCCAGGGATTGAGATTGATGAGGTGTCATTCCATAG
 CTCTGTCAATCTAGATGAGTTTGAATCTCATCGGATCCTCCACCTGCAGCCGCTCAGGGCAGCTGACT
 GTGATGAGATACCAGCTCTCTGATGACCTCCCCTCACCCTTCCCTTCCGGCTGTTTCCCTCTGTACAAT
 GGGACCAAGGCTCAGGCCGGCTCCAGGTTTACCTGAAGTTACGGTGTGACCTGCCCCAAAGAGCCAAGC
 TCTCAACATTCATCTGCACCTTCCCCTGCCTCGAGGGTGTGACCTGTCTCAGAACTGAGCAGCCCA
 GATCAGAAGGCAGAGCTGGGAGAAGGAGCCCTTCACTGGGACCTGCCCGGGTACAAGGAGGTTCTCAAC
 TCTCTGGCCTTTTCCAGATGGATGTCCTGGCTTGCAGGGACCTCCAGCCGTGGGCCGTCCTCCCTCAGC
 ACCCCCTTGGGCTGGTCTGCCAGCCTCTCCTTTGAACTCCCTCGGCACACATGCTCTGGCCTCCAG
 GTTCGATTCTCAGACTGTCCTTTAGCGCCTGTGGTAATGCCAACCTCACAAGTGGGTTGACATCTAA
 GCCACAGCAACGCCTACGTAATTCGGATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR213721 representing NM_001037977
 Red=Cloning site Green=Tags(s)

MISQFFILSSKGDPLIYKDFRSDSGRVAELFYRKLTLPLGGESPVVMYHDDRHFIIHRHSGLYLVATT
 SENVSPFSLLELLSRLATLLGDYCGSLNEGTSRNRVALVYELLDEVLDYGVYQTTSTDMRNFIIQTEAAV
 SKPFSLFDLSSVGLFGAETQQRVAPSSAASRPVLSRSQSQKNEVFLDVVERLSVLIASNGSLKVDV
 QGEIRLKSFLPSSSEICIGLTEEFVKGSELRGYGPVIRVDEVSFSSVNLDEFESHRIHLHLPQPGELT
 VMRYQLSDDLPSLPLPFRLLFSPVQWDQSGRLQVYLKLRCDLPPKSQALNIHLHLPVPRGVVLSQELSSP
 DQKAELGEGALHWDLPVQGGSQLSGLFQMDVPLQGPSPSRGSPSAPPLGLGPASLSFELPRHTCSGLQ
 VRFLRSLFSACGNANPHKWVRHLSHSNAYVIRI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

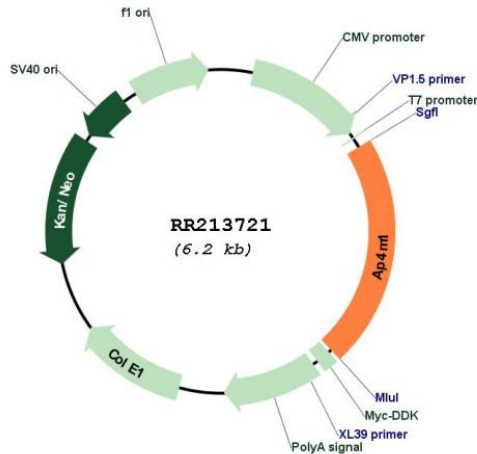
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001037977

ORF Size: 1359 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_001037977.1](#), [NP_001033066.1](#)

RefSeq Size: 1362 bp

RefSeq ORF: 1362 bp

Locus ID: 304344

UniProt ID: [Q2PWT8](#)

Cytogenetics: 12q11

MW: 49.9 kDa

Gene Summary: Component of the adaptor protein complex 4 (AP-4). Adaptor protein complexes are vesicle coat components involved both in vesicle formation and cargo selection. They control the vesicular transport of proteins in different trafficking pathways. AP-4 forms a non clathrin-associated coat on vesicles departing the trans-Golgi network (TGN) and may be involved in the targeting of proteins from the trans-Golgi network (TGN) to the endosomal-lysosomal system. It is also involved in protein sorting to the basolateral membrane in epithelial cells and the proper asymmetric localization of somatodendritic proteins in neurons. Within AP-4, the mu-type subunit AP4M1 is directly involved in the recognition and binding of tyrosine-based sorting signals found in the cytoplasmic part of cargos (By similarity). The adaptor protein complex 4 (AP-4) may also recognize other types of sorting signal (PubMed:14572453). [UniProtKB/Swiss-Prot Function]