

## Product datasheet for **RC221424**

### AMD1 (NM\_001634) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AMD1 (NM_001634) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AMD1
Synonyms:	ADOMETDC; AMD; SAMDC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221424 representing NM_001634 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGCTGCACATTTTTTGAAGGGACCGAGAAGCTGCTGGAGGTTTGGTTCTCCCGGCAGCAGCCCG  
ACGCAAACCAAGGATCTGGGATCTTCGCACTATCCCAAGATCTGAGTGGGACATACTTTTGAAGGATGT  
GCAATGTTCAATCATAAGTGTGACAAAACTGACAAGCAGGAAGCTTATGTACTCAGTGAGAGTAGCATG  
TTTGTCTCCAAGAGACGTTTCATTTTGAAGACATGTGGTACCACCCTCTTGCTGAAAGCACTGGTCCCG  
TGTTGAAGCTTGCTAGGGATTACAGTGGGTTTACTCAATTCAAAGCTTCTTTTATCTCGTAAGAATTT  
CATGAAGCCTTCTACCAAGGGTACCCACACCGGAATTTCCAGGAAGAAATAGAGTTTCTTAATGCAATT  
TTCCCAAATGGAGCAGCATATTGTATGGGACGTATGAATTCGACTGTTGGTACTTATATACTCTGGATT  
TCCCAGAGAGTCGGGTAATCAGTCAGCCAGATCAAACCTTGAAATTCGATGAGTGAGCTTGACCCAGC  
AGTTATGGACCAGTTCTACATGAAAGATGGTGTACTGCAAAGGATGTCCTCGTGAGAGTGGAAATTCGT  
GACCTGATACCAGGTTCTGTCATTGATGCCAATGTTCAATCCTTGTTGGTATTTCGATGAATGGAATGA  
AATCGGATGGAATTTATTGGACTATTCACATCACTCCAGAACCAGAATTTCTTATGTTAGCTTTGAAAC  
AACTTAAGTCAGACCTCCTATGATGACCTGATCAGGAAAGTTGTAGAAGTCTTCAAGCCAGGAAATTT  
GTGACCACCTTGTGTTAATCAGAGTTCTAAATGTCGCACAGTGCTTGCCTTCGCCCCAGAAAGATTGAAG  
GTTTTAAGCGTCTTGATTGCCAGAGTGCTATGTTCAATGATTACAATTTGTTTTTACCAGTTTTGTCTAA  
GAAGCAGCAACAACAGCAGAGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC221424 representing NM\_001634  
Red=Cloning site Green=Tags(s)

MEAAHFFEGTEKLLLEVWFSRQQPDANQGSGLRTIPRSEWDILLKDVQCSIIISVTKTDKQEAYVLESSM  
 FVSKRRFILKTCGTTLLKALVPLLKLARDYSGFDSIQSFFYSRKNFMKPSHQGYPHRNFQEEIEFLNAI  
 FPNGAAYCMGRMNSDCWLYLTDFPESRVISQPDQTLIILMSELDPAVMDQFYMKDGVAKDVTRESGIR  
 DLIPGSVIDATMFNPGYSMNGMKSDGTWYTIHITPEPEFSYVSFETNLSQTSYDDLIRKVVVEVFKPGKF  
 VTTLFVNQSSKRTVLASPKQIEGFKRLDCQSAMFNDYNFVFTSF AKKQQQQQSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6475\\_e08.zip](https://cdn.origene.com/chromatograms/mk6475_e08.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\_001634

**ORF Size:** 1002 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\\_001634.5](#)

**RefSeq Size:** 3421 bp

**RefSeq ORF:** 1005 bp

**Locus ID:** 262

**UniProt ID:** [P17707](#)

**Cytogenetics:** 6q21

**Domains:** SAM\_decarbox

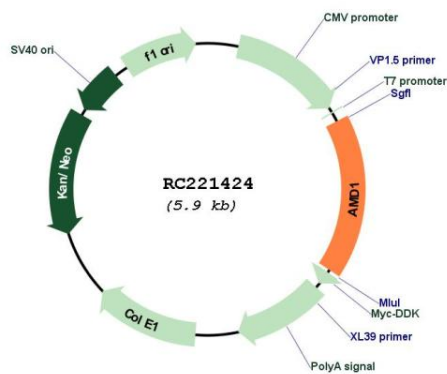
**Protein Families:** Druggable Genome

**Protein Pathways:** Arginine and proline metabolism, Cysteine and methionine metabolism, Metabolic pathways

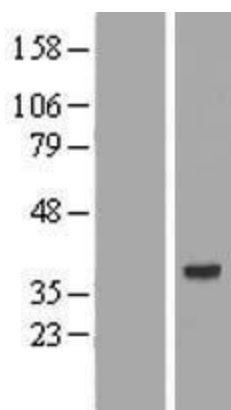
**MW:** 38.2 kDa

**Gene Summary:** This gene encodes an important intermediate enzyme in polyamine biosynthesis. The polyamines spermine, spermidine, and putrescine are low-molecular-weight aliphatic amines essential for cellular proliferation and tumor promotion. Multiple alternatively spliced transcript variants have been identified. Pseudogenes of this gene are found on chromosomes 5, 6, 10, X and Y. [provided by RefSeq, Dec 2013]

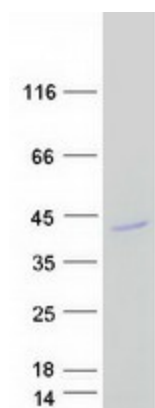
### Product images:



Circular map for RC221424



Western blot validation of overexpression lysate (Cat# [LY419830]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221424 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AMD1 protein (Cat# [TP321424]). The protein was produced from HEK293T cells transfected with AMD1 cDNA clone (Cat# RC221424) using MegaTran 2.0 (Cat# [TT210002]).