

## Product datasheet for **RC217919**

### AMPD1 (NM\_000036) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AMPD1 (NM_000036) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AMPD1
Synonyms:	MAD; MADA; MMDD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC217919 representing NM\_000036  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCCTCTGTTCAAACCTCCAGCTGAAGAGAAACAAATTGATGATGCAATGCGCAACTTTGCTGAAAAAG  
TGTTTGCCTCTGAAGTCAAAGATGAAGGAGGTCGTCAGGAGATTTCCCCCTTTGATGTGGATGAGATCTG  
TCCGATTTCTCATCATGAGATGCAAGCACACATATTCCATCTGGAGACTCTGTCCACCTCCACAGAAGCC  
AGGAGAAAAAAGCGTTTCCAAGGACGGAAGACTGTTAATTTGTCCATTCCACTAAGTGAACATCTTCCA  
CCAAACTGTCCACATTGATGAATACATTTCTCATCTCCAACCTACCAGACCGTGCCTGATTTTCAGAG  
AGTGCAGATTACTGGTACTATGCCTCTGGGGTTACAGTTGAAGATTTTGAATTTGTTGCAAAGGTCTG  
TATCGGGCACTATGCATACGTGAGAAATACATGCAGAAGTCGTTTCAGAGGTTCCCTAAAACCCCTTCCA  
AATACTTGGGAAACATTGATGGTGAGGCTTGGGTAGCAAATGAGAGCTTCTATCCAGTCTTTACTCTCC  
TGTGAAGAAGGGAGAGGACCCCTCCGAACAGACAACCTTCTGAAAACCTGGGCTATCACCTCAAATG  
AAGGACGGTGTAGTTTACGTCTATCCTAATGAAGCAGCAGTCAGCAAAGATGAGCCCTAAGCCACTTCCTT  
ACCCAAATCTGGACACCTTCTTAGACGATATGAATTTTTTACTTGCTTAAATTGCTCAAGGACCTGTAA  
GACCTATACCCACCGCGCCTGAAGTTCCTCTCCTCCAAGTTCAGGTCATCAGATGCTTAAACGAGATG  
GACGAGTTAAAGGAGCTGATAAACAACCCCAACCGAGATTTTTATAACTGCAGGAAGGTGGACCCATA  
TCCATGCAGCCGCTTGCATGAACCAGAAACATCTGCTGCGTTTTATAAGAAATCTTACCAAATTTGATG  
TGACAGAGTGGTCTATAGCACCAGAGAAAGAACTGACCCTAAAGGAACTTTTTGCTAAATTAATAATG  
CATCCTTATGACCTGACTGTTGATTCTCTGGATGTTCTATGCTGGACGCCAGACCTCCAGCGTTTTGATA  
AGTTCAATGACAAATATAATCCTGTAGGAGCAAGTGAGCTACGGGACCTCTACTTGAAGACAGACAATTA  
CATTAATGGGGAATATTTTGCCACTATCATCAAGGAGGTAGGTGCGGACCTGGTGGAGGCCAAGTACCAG  
CATGCTGAGCCCCGCTGTCCATCTATGGCCGAGTCCTGATGAGTGGAGCAAACCTCCTCCTGTTCCG  
TCTGCAATCGCATCCACTGCCCAACATGACATGGATGATCCAGGTTCCAGGATCTATGATGTGTTCCG  
TTCCAAGAATTTCTTCCACATTTTGAAAAATGCTGGAGAATATTTTCATGCCAGTGTGAGGCCACC  
ATCAACCCCAAGGCTGACCCAGAACTCAGTGTCTTCTCAAGCATATCACTGGCTTTGACAGTGTGGATG  
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CAGCATTATGATAGCAGATGATATCTCTCATGGCCTAAATTTAAAAAAGAGTCCCGTGCTACAGTACTT  
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AAAAATCCTTTTTTGATTTCTTTCAGAAAGGGCTAATGATCTCACTGTCTACAGATGACCCAATGCAAT  
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TGATATGTGCGAAGTGGCAAGGAACAGTGTCTTGCAGTGTGGAATTTCTCATGAGGAGAAAGTAAAGTTT  
CTGGGCGACAATTACCTTGAGGAAGCCCTGCTGGAAATGATATCCGGAGGACAAATGTAGCCAAATCC  
GCATGGCCTATCGCTATGAAACCTGGTGTATGAACTCAATTTAATTGCTGAGGGTCTTAAATCAACAGA  
A

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC217919 representing NM\_000036  
Red=Cloning site Green=Tags(s)

MPLFKLPAAEKQIDDAMRNFAEKVFASEVKDEGGRQEISPFVDVEICPISHHEMQAHIFHLETSTSTEAR  
 RRRKRFQGRKTVNLSIPLSETSSTKLSHIDEYISSSPTYQTVPDFQRVQITGDYASGVTVEDFEIVCKGL  
 YRALCIREKYMQKSFQRFPKTPSKYLRNIDGEAWVANESFYVPVTPPVKKGEDPFRDNLNENLGYHLKM  
 KDGVVVYYPNEAAVSKDEPKLPYPNLDLFLDDMNFLALIAQGPVKTYTHRRLLKFLSSKFQVHQMLNEM  
 DELKELINPHRDFYNCRKVDTHIAAACMNQKHLLRFIKKSYQIDADR VVYSTKEKNLTLKELFAKLKM  
 HPYDLTVDSLVDVHAGRQTFQRFDFKNDKYNPVGASELRDLYLKTDNYINGEYFATIIKEVGADLVEAKYQ  
 HAEPRLSIYGRSPDEWSKLSSWFVNCRIHCPNMTWMIQVPRIYDVFRSKNFLPHFGKMLENIFMPVFEAT  
 INPQADPEL SVFLKHITGFDSVDDSKHSGHMFSSKSPKQEWLEKNPSYTYYYMYANIMVNLNLRK  
 ERGMNTFLFRPHCGEAGALTHLMTAFMIADDISHGLNLKSPVLQYLFLLAQIPIAMSPLSNNSLFL EYA  
 KNPFLDFLQGLMISLSTDDPMQFHFTKEPLMEEY AIAAQVFKLSTCDMCEVARNSVLQCGISHEEKVKF  
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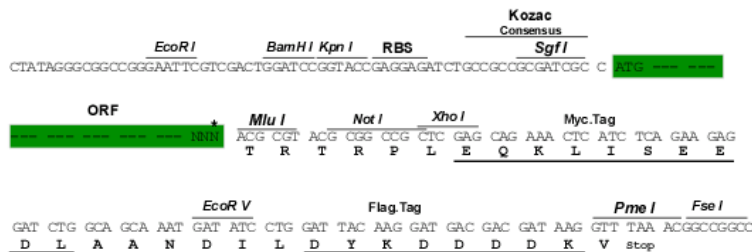
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6205\\_e04.zip](https://cdn.origene.com/chromatograms/mk6205_e04.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\_000036

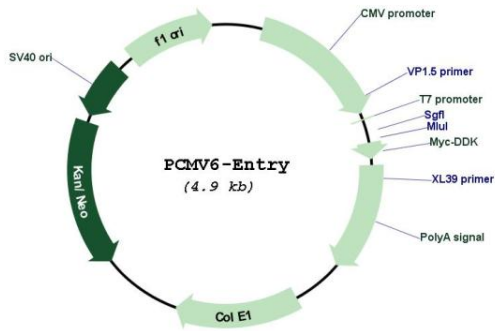
**ORF Size:** 2241 bp

**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](#)

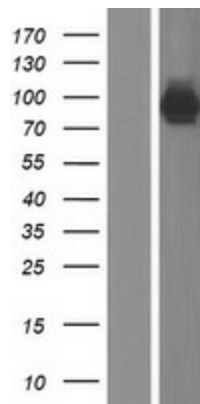
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000036.1</a> , <a href="#">NP_000027.1</a>
<b>RefSeq Size:</b>	2426 bp
<b>RefSeq ORF:</b>	2244 bp
<b>Locus ID:</b>	270
<b>UniProt ID:</b>	<a href="#">P23109</a>
<b>Cytogenetics:</b>	1p13.2
<b>Domains:</b>	A_deaminase
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Purine metabolism
<b>MW:</b>	86.5 kDa
<b>Gene Summary:</b>	Adenosine monophosphate deaminase 1 catalyzes the deamination of AMP to IMP in skeletal muscle and plays an important role in the purine nucleotide cycle. Two other genes have been identified, AMPD2 and AMPD3, for the liver- and erythrocyte-specific isoforms, respectively. Deficiency of the muscle-specific enzyme is apparently a common cause of exercise-induced myopathy and probably the most common cause of metabolic myopathy in the human. Alternatively spliced transcript variants encoding different isoforms have been identified in this gene.[provided by RefSeq, Feb 2010]

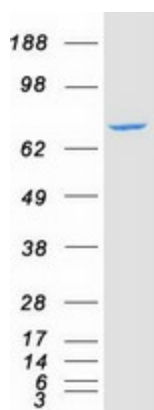
Product images:



Circular map for RC217919



Western blot validation of overexpression lysate (Cat# [LY400008]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217919 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AMPD1 protein (Cat# [TP317919]). The protein was produced from HEK293T cells transfected with AMPD1 cDNA clone (Cat# RC217919) using MegaTran 2.0 (Cat# [TT210002]).