

## Product datasheet for **RC230489**

### AMPD1 (NM\_001172626) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AMPD1 (NM_001172626) 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)



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ORF Nucleotide  
Sequence:

>RC230489 representing NM\_001172626  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAATGTCAGGATATTTTATAGTGTACAGTCAGTACCCACAGTCTCCTCTCTCTTTTCTACTGTG  
CTATCCTAGAATCAAGGATTTTCCAGCAACAATGCCTCTGTTCAAACCTCCAGAAATTGATGATGCAATGCG  
CAACTTTGCTGAAAAAGTGTTCCTCTGAAGTCAAAGATGAAGGAGGTCGTGAGAGATTTCCCCCTTT  
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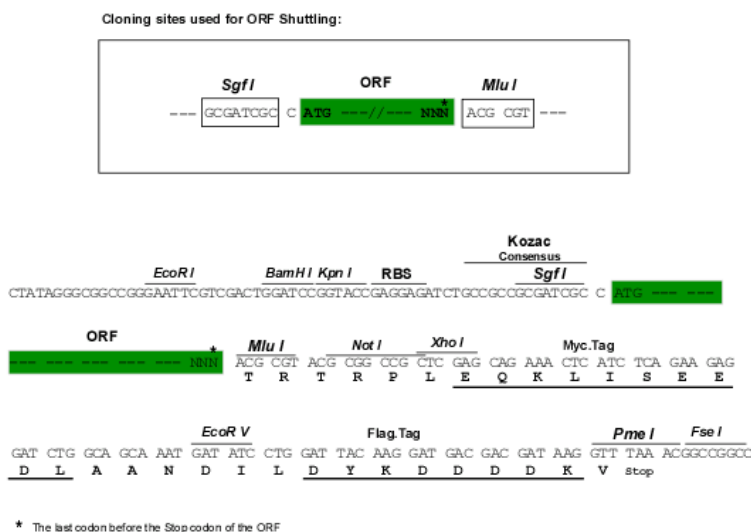
**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA**

**Protein Sequence:** >RC230489 representing NM\_001172626  
 Red=Cloning site Green=Tags(s)

MNVRIFYSVSQSPHLLSLLFYCAILESRI SATMPLFKLPEIDDAMRNFAEKVFASEVKDEGGRQEISPF  
 DVDEICPISHHEMQAHIFHLETSTSTEARRKKRFQGRKTVNLSIPLSETSSSTKLSHIDEYISSSPTYQT  
 VPDFQRVQITGDYASGVTVEDFEIVCKGLYRALCIREKYMQSFQRFPKTPSKYLRNIDGEAWVANESFY  
 PVFTPPVKKGEDPFRTDNL PENLGYHLKMKDGVVYVYPNEAAVSKDEPKPLPYPNLDTFLLDMNFLALI  
 AQGPVKTYTHRRLLKFLSSKFQVHQMLNEMDELKELKNNPHRDFYNCRKVDTHIAAACMNQKHLRFIKK  
 SYQIDADRVVYSTKEKNLTLKELFAKLKMHYPDLTVDSL DVHAGRQTFQRFDFKFNKYNPVGASELRDLY  
 LKTDNYINGEYFATIIEKVGADLVEAKYQHAEPRLSIYGRSPDEWSKLSWFVCNRIHCPNMTWMIQVPR  
 IYDVFRSKNFLPHFGKMLENIFMPVFEATINPQADPELSVFLKHITGFDSVDES KHSGHMFSSKSPKPQ  
 EWTLEKNPSYTYYYMYANIMVLSLRKERGMNTFLFRPHCGEAGAL THLMTAFMIADDISHGLNLKKS  
 PVLQYLFFLAQIPIAMSPLSNNSLFLEYAKNPFDFLQGLMISLSTDDPMQHFHTKEPLMEEYIAAQV  
 FKLSTCDMCEVARNSVLQCGISHEEKVKFLGDNYLEEGPAGNDIRRTNVAQIRMAYRYETWCYELNLIAE  
 GLKSTE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001172626

**ORF Size:** 2328 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\\_001172626.1](#), [NP\\_001166097.1](#)

**RefSeq ORF:** 2232 bp

**Locus ID:** 270

**UniProt ID:** [P23109](#)

**Cytogenetics:** 1p13.2

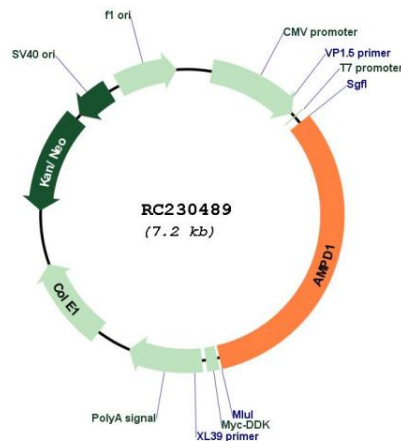
**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Purine metabolism

**MW:** 90.2 kDa

**Gene Summary:** 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 RC230489