

Product datasheet for **RC216874**

APRT (NM_000485) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: APRT (NM_000485) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: APRT
Synonyms: AMP; APRTD
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216874 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGACTCCGAGCTGCAGCTGGTTGAGCAGCGGATCCGAGCTTCCCCGACTTCCCCACCCAGGCG
TGGTATTCAGGGACATCTCGCCGTCCTGAAGGACCCCGCTCCTCCGCGCCGCATCGGCTCCTGGC
GCGACACCTGAAGGCGACCCACGGGGCCGCATCGACTACATCGCAGGCTAGACTCCCGAGGCTTCTC
TTTGGCCCTCCCTGGCCAGGAGCTTGGACTGGGCTGCGTGCTCATCCGAAAGCGGGGGAAGCTGCCAG
GCCCACTCTGTGGCCCTCTATTCCTGGAGTACGGGAAGGCTGAGCTGGAGATTCAGAAAGACGCCCT
GGAGCCAGGACAGAGGGTGGTCGTCGTGGATGATCTGCTGGCCACTGGTGAACCATGAACGCTGCCTGT
GAGCTGCTGGGCCGCTGCAGGCTGAGGTCTGGAGTGCCTGAGCCTGGTGGAGCTGACCTCGCTTAAGG
GCAGGGAGAAGCTGGCACCTGTACCCTTCTCTCTCCTGCAGTATGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216874 protein sequence
Red=Cloning site Green=Tags(s)

MADSELQLVEQIRSFDFPTPGVVFRDISPVLKDPASFRAAIGLLARHLKATHGGRIDYIAGLDSRGFL
FGPSLAQELGLGCVLIRKRGKLPGPTLWASYSLEYGKAELEIQKDALEPGQRVVVDDLLATGGTMNAAC
ELLGRLQAEVLECVSLVELTSLKGREKLAPVPPFSLLQYE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

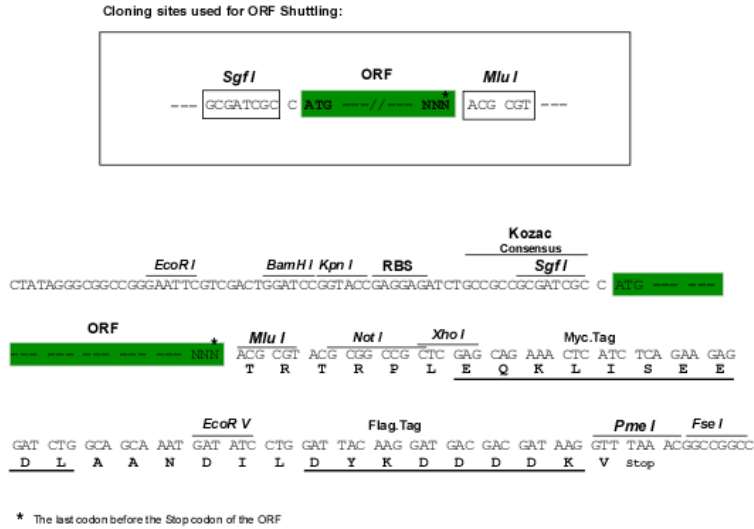
Chromatograms: https://cdn.origene.com/chromatograms/mk6446_e02.zip



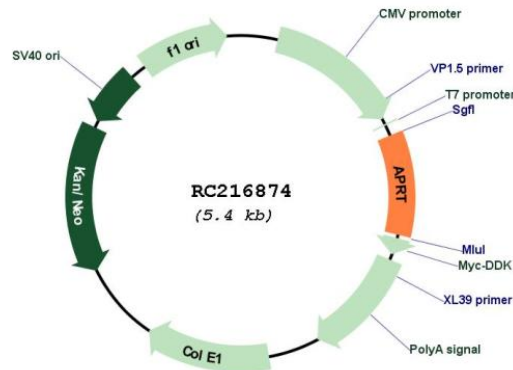
[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_000485

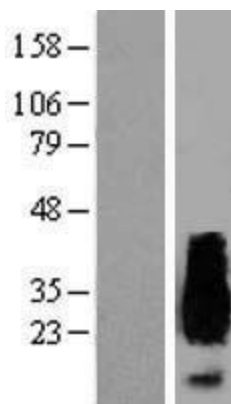
ORF Size: 540 bp

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](#)

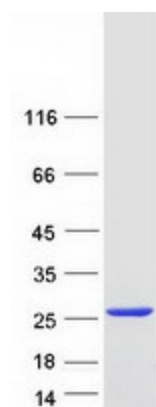
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_000485.3
RefSeq Size:	807 bp
RefSeq ORF:	543 bp
Locus ID:	353
UniProt ID:	P07741
Cytogenetics:	16q24.3
Domains:	Pribosyltran
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Purine metabolism
MW:	19.6 kDa
Gene Summary:	Adenine phosphoribosyltransferase belongs to the purine/pyrimidine phosphoribosyltransferase family. A conserved feature of this gene is the distribution of CpG dinucleotides. This enzyme catalyzes the formation of AMP and inorganic pyrophosphate from adenine and 5-phosphoribosyl-1-pyrophosphate (PRPP). It also produces adenine as a by-product of the polyamine biosynthesis pathway. A homozygous deficiency in this enzyme causes 2,8-dihydroxyadenine urolithiasis. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Western blot validation of overexpression lysate (Cat# [LY424695]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216874 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified APRT protein (Cat# [TP316874]). The protein was produced from HEK293T cells transfected with APRT cDNA clone (Cat# RC216874) using MegaTran 2.0 (Cat# [TT210002]).