

## APRT cDNA

Catalog Number: ATGD0011

### PRODUCT INFORMATION

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**Catalog number**

ATGD0011

**Product type**

cDNA

**Species**

Human

**NCBI Accession No.**

NP\_000476.1

**Alternative Names**

AMP, APRTD

**mRNA Refseq**

NM\_000485.2

**OMIM**

102600

**Chromosome location**

16q24

### PRODUCT SPECIFICATION

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**Formulation**

Lyophilized

**Storage**

Store the plasmid at -20C.

**cDNA Size**

543bp

**Preparation before usage**

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA. Each tube contains approximately 10ug of lyophilized plasmid.

**Vector description**

This shuttle vector contains the complete ORF. It is inseted Nde I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

**Cloning Vector**

pATGen (puc19-derived cloning vector)

**General Description**

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APRT (adenine phosphoribosyltransferase) is a 180 amino acid protein that localizes to the cytoplasm and belongs to the purine/pyrimidine phosphoribosyltransferase family. Existing as a homodimer, APRT functions to catalyze the formation of inorganic pyrophosphate and AMP from adenine and 5-phosphoribosyl-1-pyrophosphate (PRPP), a reaction that is essential for both purine metabolism and AMP biosynthesis. It also produces adenine as a by-product of the polyamine biosynthesis pathway

### DATA

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#### Sequence nucleotides

```
ATGGCCGACT CCGAGCTGCA GCTGGTTGAG CAGCGGATCC GCAGCTTCCC CGACTTCCCC ACCCCAGGCG  
TGGTATTCAG GGACATCTCG CCCGTCCTGA AGGACCCCGC CTCCTTCCGC GCCGCCATCG GCCTCCTGGC  
GCGACACCTG AAGGCGACCC ACGGGGGCCG CATCGACTAC ATCGCAGGCC TAGACTCCCG AGGCTTCCTC  
TTTGGCCCCT CCCTGGCCCA GGAGCTTGA CTGGGCTGCG TGCTCATCCG AAAGCGGGGG AAGCTGCCAG  
GCCCCACTCT GTGGGCCTCC TATTCCCTGG AGTACGGGAA GGCTGAGCTG GAGATTCAGA AAGACGCCCT  
GGAGCCAGGA CAGAGGGTGG TCGTCGTGGA TGATCTGCTG GCCACTGGTG GAACCATGAA CGCTGCCTGT  
GAGCTGCTGG GCCGCCTGCA GGCTGAGGTC CTGGAGTGCG TGAGCCTGGT GGAGCTGACC TCGCTTAAGG  
GCAGGGAGAA GCTGGCACCT GTACCCTTCT TCTCTCTCCT GCAGTATGAG TGA
```

#### Transaction Sequence

```
MADSELQLVE QRIRSFDFP TPGVVFRDIS PVLKDPASFR AAIGLLARHL KATHGGRIDY IAGLDSRGFL FGPSLAQELG  
LGCVLIRKRG KLPGPTLWAS YSLEYGKAEL EIQKDALEPG QRVVVVDDLL ATGGTMNAAC ELLGRLQAEV LECVSLVELT  
SLKGREKLAP VPFSSLLQYE
```