

# ARG1 cDNA

Catalog Number: ATGD0012

## PRODUCT INFORMATION

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**Catalog number**

ATGD0012

**Product type**

cDNA

**Species**

Human

**NCBI Accession No.**

NP\_000036.2

**Alternative Names**

Type I arginase, Liver type arginase, liver A I, Arginase-1 liver, Arginase-1, Arginase type I, Arginase liver, ARG1, AI

**mRNA Refseq**

NM\_000045.3

**OMIM**

608313

**Chromosome location**

6q23

## PRODUCT SPECIFICATION

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**Formulation**

Lyophilized

**Storage**

Store the plasmid at -20C.

**cDNA Size**

969bp

**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 inserted BamH 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)

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## General Description

Arginase is a manganese-containing enzyme which catalyzes the hydrolysis of arginine to ornithine and urea. It is the final enzyme of the urea cycle. At least two isoforms of mammalian arginase exist (types I and II) which differ in their tissue distribution, subcellular localization, immunologic crossreactivity and physiologic function. The type I isoform functions in the urea cycle, and is located primarily in the cytoplasm of the liver. The type II isoform has been implicated in the regulation of the arginine/ornithine concentrations in the cell. It is located in mitochondria of several tissues in the body, with most abundance in the kidney and prostate

## DATA

### Sequence nucleotides

```
ATGAGCGCCA AGTCCAGAAC CATAGGGATT ATTGGAGCTC CTTTCTCAA GGGACAGCCA CGAGGAGGGG  
TGGAAAGAAGG CCCTACAGTA TTGAGAAAGG CTGGTCTGCT TGAGAAAAGT AAAGAACAAAG AGTGTGATGT  
GAAGGATTAT GGGGACCTGC CCTTTGCTGA CATCCCTAAAT GACAGTCCTT TTCAAAATTGT GAAGAACATCA  
AGGTCTGTGG GAAAAGCAAG CGAGCAGCTG GCTGGCAAGG TGGCAGAAGT CAAGAACAAAC GGAAGAACATCA  
GCCTGGTGTGG GGGCGGAGAC CACAGTTGG CAATTGGAAG CATCTCTGGC CATGCCAGGG TCCACCCTGA  
TCTTGGAGTC ATCTGGGTGG ATGCTCACAC TGATATCAAC ACTCCACTGA CAACCACAAG TGGAAACTTG  
CATGGACAAAC CTGTATCTT CCTCCTGAAG GAACTAAAAG GAAAGATTCC CGATGTGCCA GGATTCTCCT  
GGGTGACTCC CTGTATATCT GCCAAGGATA TTGTGTATAT TGGCTTGAGA GACGTGGACC CTGGGGAAACA  
CTACATTTG AAAACTCTAG GCATTAATAA CTTTCAATG ACTGAAGTGG ACAGACTAGG AATTGGCAAG  
GTGATGGAAG AAACACTCAG CTATCTACTA GGAAGAAAGA AAAGGCCAAT TCATCTAAGT TTTGATGTTG  
ACGGACTGGA CCCATCTTC ACACCAGCTA CTGGCACACC AGTCGTGGG GGTCTGACAT ACAGAGAACGG  
TCTCTACATC ACAGAAGAAA TCTACAAAAC AGGGCTACTC TCAGGATTAG ATATAATGGA AGTGAACCCA  
TCCCTGGGGAGACACCCAGA AGAAGTAAC CGAACAGTGA ACACAGCAGT TGCAATAACC TTGGCTTGT  
TCGGACTTGC TCGGGAGGGT AATCACAAGC CTATTGACTA CCTTAACCCA CCTAAGTAA
```

### Transaction Sequence

```
MSAKSRTIGI IGAPFSKGQP RGGVEEGPTV LRKAGLLEKL KEQECDVKDY GDLPFADIPN DSPFQIVKNP RSVGKASEQL  
AGKVAEVKKN GRISLVLGGD HSLAIGSISG HARVHPDLGV IWVDAHTDIN TPLTTSGNL HGQPVSFLLK ELKGKIPDVP  
GFSWVTPCIS AKDIVYIGLR DVDPGEHYIL KTLGIKYFSM TEVDRLGIGK VMEETLSYLL GRKKRPIHLS FDVDGLDPSF  
TPATGTPVVG GLTYREGLYI TEEIYKTGLL SGLDIMEVNP SLGKTPEEVTVNTAVAIT LACFGLAREG NHKPIDYLNP PK
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