

ARG1 cDNA

Catalog Number: ATGD0012

PRODUCT INFORMATION

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

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 inseted 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

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ATGAGCGCCA AGTCCAGAAC CATAGGGATT ATTGGAGCTC CTTTCTCAA GGGACAGCCA CGAGGAGGGG
TGGAAGAAGG CCCTACAGTA TTGAGAAAGG CTGGTCTGCT TGAGAACTT AAAGAACAAG AGTGTGATGT
GAAGGATTAT GGGGACCTGC CCTTTGCTGA CATCCCTAAT GACAGTCCCT TTCAAATTGT GAAGAATCCA
AGGTCTGTGG GAAAAGCAAG CGAGCAGCTG GCTGGCAAGG TGGCAGAAGT CAAGAAGAAC GGAAGAATCA
GCCTGGTGCT GGGCGGAGAC CACAGTTTGG CAATTGGAAG CATCTCTGGC CATGCCAGGG TCCACCCTGA
TCTTGAGATC ATCTGGGTGG ATGCTCACAC TGATATCAAC ACTCCACTGA CAACCACAAG TGGAACTTG
CATGGACAAC CTGTATCTTT CCTCCTGAAG GAACTAAAAG GAAAGATTCC CGATGTGCCA GGATTCTCCT
GGGTGACTCC CTGTATATCT GCCAAGGATA TTGTGTATAT TGGCTTGAGA GACGTGGACC CTGGGGAACA
CTACATTTTG AAAACTCTAG GCATTAAATA CTTTCAATG ACTGAAGTGG ACAGACTAGG AATTGGCAAG
GTGATGGAAG AAACACTCAG CTATCTACTA GGAAGAAAGA AAAGGCCAAT TCATCTAAGT TTTGATGTTG
ACGGACTGGA CCCATCTTTC ACACCAGCTA CTGGCACACC AGTCGTGGGA GGTCTGACAT ACAGAGAAGG
TCTCTACATC ACAGAAGAAA TCTACAAAAC AGGGCTACTC TCAGGATTAG ATATAATGGA AGTGAACCCA
TCCCTGGGGA AGACACCAGA AGAAGTAACT CGAACAGTGA ACACAGCAGT TGCAATAACC TTGGCTTGTT
TCGGACTTGC TCGGGAGGGT AATCACAAGC CTATTGACTA CCTTAACCCA CCTAAGTAA
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Transaction Sequence

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MSAKSRTIGI IGAPFSKGQP RGGVEEGPTV LRKAGLLEKL KEQECDVKDY GDLPFADIPN DSPFQIVKNP RSVGKASEQL
AGKVAEVKKK GRISLVLGGD HSLAIGSISG HARVHPDLGV IWVDAHTDIN TPLTTTSGNL HGQPVSFLLK ELKGKIPDVP
GFSWVTPCIS AKDIVYIGLR DVDPGEHYIL KTLGIKYFSM TEVDRLGIGK VMEETLSYLL GRKKRPIHLS FDVDGLDPSF
TPATGTPVVG GLTYREGLYI TEEIYKTGLL SGLDIMEVNP SLGKTPEEVT RTVNTAVAIT LACFGLAREG NHKPIDYLNPK
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