

AR09474PU-N**Human Arginase-1 (1-322, His-tag) - Purified**

Alternate names:	ARG1, Liver-type arginase, Type I arginase
Quantity:	0.1 mg
Concentration:	0.5 mg/ml (determined by Bradford assay)
Background:	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.
Uniprot ID:	P05089
NCBI:	NP_000036
GeneID:	383
Species:	Human
Source:	E. coli
Format:	State: Liquid purified protein Purity: >85% by SDS - PAGE Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 2 mM DTT, 100 mM NaCl
Description:	Recombinant human ARG1, fused to His-tag at C-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. AA Sequence: MSAKSRTIGI IGAPFSKGQP RGGVEEGPTV LRKAGLLEKL KEQECDVKDY GDLPFADIPN DSPFQIVKNP RSVGKASEQL AGKVAEVKKN GRISLVLGGD HSLAIGSISG HARVHPDLGV IWVDAHTDIN TPLTTTSGNL HGQPVSFLLK ELKGKIPDVP GFSWVTPCIS AKDIVYIGLR DVPDGEHYIL KTLGIKYFSM TEVDRLGIGK VMEETLSYLL GRKKRPIHLS FDVDGLDPSF TPATGTPVVG GLTYREGLYI TEEIYKTGLL SGLDIMEVNP SLGKTPEEVT RTVNTAVAIT LACFGLAREG NHKPIDYLNPKLEHHHHHH Molecular weight: 35.8 kDa (330 aa), confirmed by MALDI-TOF
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Iyer RK, Yoo PK, Kern RM, Rozengurt N, Tsoa R, O'Brien WE, et al. Mouse model for human arginase deficiency. Mol Cell Biol. 2002 Jul;22(13):4491-8. PubMed PMID: 12052859. 2. Wu G., et al (1998) The Biochemical journal 336 (Pt 1) 1-17.

Pictures:

Recombinant human ARG1, 1-322 aa, His-tagged: 15% SDS-PAGE (3 µg)

