

# Recombinant Human Arginase-1/ARG1 Protein (His Tag)



Catalog Number:PKSH033453

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

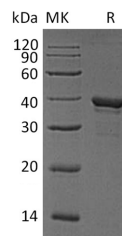
## Description

<b>Synonyms</b>	Arginase-1;Liver-type arginase;Type I arginase;ARG1
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Lys322
<b>Accession</b>	P05089
<b>Calculated Molecular Weight</b>	35.6 kDa
<b>Observed molecular weight</b>	38 kDa
<b>Tag</b>	C-His

## Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 20% Glycerol, 1mM DTT, pH 7.4.
<b>Reconstitution</b>	Not Applicable

## Data



> 90 % as determined by reducing SDS-PAGE.

## Background

Arginase is the focal enzyme of the urea cycle hydrolysing L-arginine to urea and L-ornithine. Emerging studies have identified arginase in the vasculature and have implicated this enzyme in the regulation of nitric oxide (NO) synthesis and the development of vascular disease. Arginase also redirects the metabolism of L-arginine to L-ornithine and the formation of polyamines and L-proline, which are essential for smooth muscle cell growth and collagen synthesis. Arginase is encoded by two recently discovered genes (Arginase I and Arginase II). In most mammals, Arginase 1 (ARG1) also known as Arginase, liver, which functions in the urea cycle, and is located primarily in the cytoplasm of the liver. The second isozyme, Arginase II, 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. It may be found at lower levels in macrophages, lactating mammary glands, and brain.

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