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

Catalog Number: PKSH033453

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

## Description

Species Human

Source HEK293 Cells-derived Human Arginase-1/ARG1 protein Met 1-Lys322, with an C-

terminal His

 Mol\_Mass
 35.6 kDa

 Accession
 P05089

**Bio-activity** Not validated for activity

### **Properties**

**Purity** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin**  $< 1.0 \text{ EU per } \mu\text{g of the protein as determined by the LAL method.}$ 

Storage Storage Store at  $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

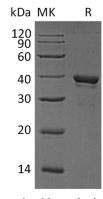
packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 20% Glycerol,

1mM DTT, pH 7.4.

**Reconstitution** 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 (ARGI) 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.

#### For Research Use Only

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