Recombinant Protein Technical Manual

Recombinant Human Arginase/ARG1 Protein (His Tag)(Active)

RPES4663

Product Data:

Product SKU: RPES4663

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: NP_000036.2

Protein Information:

Molecular Mass: 35.6 kDa

AP Molecular Mass: 38 kDa

Tag: C-His

Bio-activity: Measured by the production of urea during the hydrolysis of arginine. The specific activity is 46411 pmol/min/µg.

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

Endotoxin:

Storage: Supplied as a 0.2 µm filtered solution of 20mM Tris, 150mMNaCl, 20%Glycerol,1mMDTT,pH7.4.

Shipping:

Formulation:

Reconstitution:

Application:

Synonyms: Arginase; Liver-type arginase; Type I arginase; ARG1

Immunogen Information:

Sequence: Met 1-Lys322

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.