



# Recombinant Protein Technical Manual

## Recombinant Human Arginase/ARG1 Protein (E. coli, His Tag)(Active)

RPES2985

### Product Data:

**Product SKU:** RPES2985

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P05089

### Protein Information:

**Molecular Mass:** 35.8 kDa

**AP Molecular Mass:** 40 kDa

**Tag:** C-6His

**Bio-activity:** Measured by the production of urea during the hydrolysis of arginine. The specific activity is 6136.25 pmol/min/µg.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°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, 150mM NaCl, 20% Glycerol, 1mM DTT, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

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

## Immunogen Information:

**Sequence:** Met 1-lys322

## Background:

ARG1 is a member of the ureohydrolase family of enzymes. ARG1 can catalyze the hydrolysis of arginine to ornithine and urea. In the urea cycle, ARG1 catalyzes the fifth and final step, a series of biochemical reactions in mammals during which the body disposes of harmful ammonia. ARG1 is a cytosolic enzyme and expressed widely in the liver as part of the urea cycle. Inherited deficiency of this ARG1 causes argininemia, which is an autosomal recessive disorder characterized by hyperammonemia.