Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Recombinant Human Arginase 1/ARG1 Protein

Catalog No.: RP00247 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	383	P05089-1

Tags
C-His

Synonyms
ARG1; arginase-1;arginase-1

Product Information

Source	Purification
HEK293 cells	≥ 90 % as determined by SDS-PAGE.

Calculated MW	Observed MW
35.57 kDa	40 kDa

Endotoxin
< 0.01 EU/μg of the protein by LAL method

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Background

Arg1 also known as liver arginase, is a binuclear manganese metalloenzyme. It is a key enzyme of the urea cycle that catalyses the conversion of L-arginine into L-ornithine and urea, the final cytosolic reaction of urea formation in the mammalian liver. Arginase 1 is abundantly expressed in liver, but it is also expressed in cells and tissues that lack a complete urea cycle, including lung. Arginase is a critical regulator of nitric oxide synthesis and vascular function. It is implicated in a variety of human diseases including vascular disease, pulmonary disease, infectious disease, immune cell function and cancer. In humans, hereditary defects in arginase result in an accumulation of arginine in the blood known as hyperarginemia. Arginase deficiency can also result in the accumulation of nitrogen in the form of ammonia, which results in hyperammonemia.

Basic Information

Description
Recombinant Human Arginase 1/ARG1 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Met 1 - Lys 322) of human Arginase (Accession #NP_000036.2) fused with a 6×His tag at the C-terminus.

Bio-Activity
Measured by the production of urea during the hydrolysis of arginine. The specific activity is >27833 pmol/min/μg.

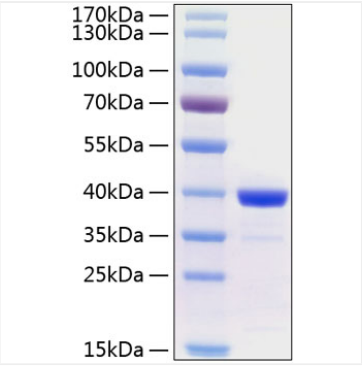
Shipping
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

* □□□□□□□□□□□□□□□□□□□□□□□□□□□□

Validation Data



Recombinant Human Arginase 1/ARG1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.