Datasheet for ABIN7534370

Liver Arginase Protein (His tag)

Go to Product page

Overview

Quantity:	100 µg
Target:	Liver Arginase (ARG1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Liver Arginase protein is labelled with His tag.

Product Details

Purpose:	Active Recombinant Human Arginase 1/ARG1 Protein
Sequence:	MSAKSRTIGI IGAPFSKGQP RGGVEEGPTV LRKAGLLEKL KEQECDVKDY GDLPFADIPN DSPFQIVKNP RSVGKASEQL AGKVAEVKKN GRISLVLGGD HSLAIGSISG HARVHPDLGV IWVDAHTDIN TPLTTTSGNL HGQPVSFLLK ELKGKIPDVP GFSWVTPCIS AKDIVYIGLR DVDPGEHYIL KTLGIKYFSM TEVDRLGIGK VMEETLSYLL GRKKRPIHLS FDVDGLDPSF TPATGTPVVG GLTYREGLYI TEEIYKTGLL SGLDIMEVNP SLGKTPEEVT RTVNTAVAIT LACFGLAREG NHKPIDYLNP PK
Specificity:	Met1-Lys322
Purity:	> 92 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	< 0.01 EU/µg of the protein by LAL method.
Biological Activity Comment:	Measured by the production of urea during the hydrolysis of arginine. The specific activity is

Product Details

	>27833 pmol/min/µg.

Target Details

Target:	Liver Arginase (ARG1)
Alternative Name:	Arginase 1 (ARG1 Products)
Background:	Description: 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. Name: ARG1, arginase-1,arginase-1
Gene ID:	383
UniProt:	P05089-1
Pathways:	Cellular Response to Molecule of Bacterial Origin

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex 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.
Buffer:	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C

Handling

Storage Comment:	Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.