Arginase-2/ARG2 Protein, Mouse (His-SUMO)

Cat. No.:	HY-P72090
Synonyms:	Arg2Arginase-2; mitochondrial; EC 3.5.3.1; Arginase II; Kidney-type arginase; Non-hepatic arginase; Type II arginase
Species:	Mouse
Source:	E. coli
Accession:	O08691 (V23-I354)
Gene ID:	11847
Molecular Weight:	Approximately 52.4 kDa

PROPERTIES

AA Sequence	V H S V A I V G A P F S R G Q K K L G V E Y G P A A I R E A G L L K R L S R L G C H L K D F G D L S F T N V P Q D D P Y N N L V V Y P R S V G L A N Q E L A E V V S R A V S G G Y S C V T M G G D H S L A I G T I I G H A R H R P D L C V I W V D A H A D I N T P L T T V S G N I H G Q P L S F L I K E L Q D K V P Q L P G F S W I K P C L S P P N I V Y I G L R D V E P P E H F I L K N Y D I Q Y F S M R E I D R L G I Q K V M E Q T F D R L I G K R Q R P I H L S F D I D A F D P K L A P A T G T P V V G G L T Y R E G V Y I T E E I H N T G L L S A L D L V E V N P H L A T S E E E A K A T A R L A V D V I A S S F G Q T R E G G H I V Y D H L P T P S S P H E S E N E E C V R I
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm sterile filtered PBS, 6% Trehalose, pH 7.4
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US;may vary elsewhere.

DESCRIPTION

Background	Arginase-2 (ARG2) emerges as a multifaceted player in cellular regulation, with a pivotal role in orchestrating extra-urea cycle arginine metabolism and modulating nitric oxide synthesis. Beyond its hepatic functions, ARG2's impact extends to

innate and adaptive immune responses, suggesting a critical role in shaping the immune landscape. Notably, it appears to negatively regulate the survival capacity of activated CD4(+) and CD8(+) T cells, exerting influence over inflammation-related signaling in asthmatic airway epithelium. The immune evasion strategies of H. pylori may also involve ARG2, restricting M1 macrophage activation and polyamine metabolism. Additionally, ARG2 contributes to prenatal immune suppression and regulates RPS6KB1 signaling, influencing endothelial cell senescence and inflammation. Intriguingly, ARG2's effects extend to endothelial autophagy and vascular smooth muscle cell senescence and apoptosis, emphasizing its diverse functions independent of its classical enzymatic activity.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA