

Anti-Arginase 2 Antibody
Rabbit polyclonal antibody to Arginase 2
Catalog # AP59482

Specification

Anti-Arginase 2 Antibody - Product Information

Application	WB
Primary Accession	P78540
Reactivity	Human, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38578

Anti-Arginase 2 Antibody - Additional Information

Gene ID 384

Other Names

Arginase-2 mitochondrial; Kidney-type arginase; Non-hepatic arginase; Type II arginase

Target/Specificity

Recognizes endogenous levels of Arginase 2 protein.

Dilution

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Arginase 2 Antibody - Protein Information

Name ARG2

Function

May play a role in the regulation of extra-urea cycle arginine metabolism and also in down-regulation of nitric oxide synthesis. Extrahepatic arginase functions to regulate L-arginine bioavailability to nitric oxid synthase (NOS). Arginine metabolism is a critical regulator of innate and adaptive immune responses. Seems to be involved in negative regulation of the survival capacity of activated CD4(+) and CD8(+) T cells (PubMed:27745970). May suppress inflammation- related signaling in asthmatic airway epithelium (PubMed:27214549). May contribute to the immune evasion of H.pylori by restricting M1 macrophage activation and polyamine metabolism (By similarity). In fetal dendritic cells may play a role in promoting immune

suppression and T cell TNF-alpha production during gestation (PubMed:28614294). Regulates RPS6KB1 signaling, which promotes endothelial cell senescence and inflammation and implicates NOS3/eNOS dysfunction (PubMed:22928666). Can inhibit endothelial autophagy independently of its enzymatic activity implicating mTORC2 signaling (PubMed:25484082). Involved in vascular smooth muscle cell senescence and apoptosis independently of its enzymatic activity (PubMed:23832324). Since NOS is found in the penile corpus cavernosum smooth muscle, the clitoral corpus cavernosum and the vagina, arginase-2 plays a role in both male and female sexual arousal (PubMed:12859189).

Cellular Location

Mitochondrion.

Tissue Location

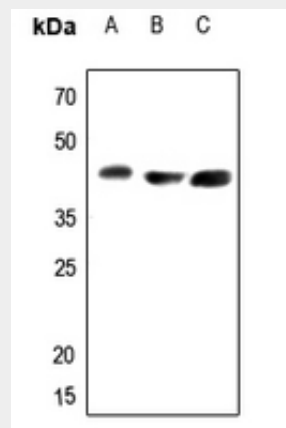
Expressed most strongly in kidney and prostate, much less strongly in the brain, skeletal muscle, placenta, lung, mammary gland, macrophage, uterus, testis and gut, but apparently not in the liver, heart and pancreas. Expressed in activated T cells (PubMed:27745970).

Anti-Arginase 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Arginase 2 Antibody - Images



Western blot analysis of Arginase 2 expression in HEK293T (A), HeLa (B), DLD (C) whole cell lysates.

Anti-Arginase 2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Arginase 2. The exact sequence is proprietary.