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Anti-Arginase 2 Antibody

Rabbit polyclonal antibody to Arginase 2
Catalog # AP59482

Product Information

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

Additional Information

Gene ID	384
Other Names	Arginase-2 mitochondrial; Kidney-type arginase; Non-hepatic arginase; Type II arginase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Arginase 2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IP~~N/A
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

Protein Information

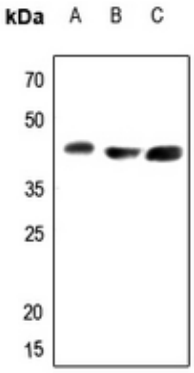
Name	ARG2
Function	May play a role in the regulation of extra-urea cycle arginine metabolism and also in down-regulation of nitric oxide synthesis. Extrahepatic arginase functions to regulate L-arginine bioavailability to nitric oxid synthase (NOS). Arginine metabolism is a critical regulator of innate 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).

Background

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

Images



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