

KD-Validated Anti-Arginase 2 Rabbit Polyclonal Antibody Rabbit polyclonal antibody Catalog # AGI2115

Specification

KD-Validated Anti-Arginase 2 Rabbit Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB <u>P78540</u> Human Polyclonal Rabbit IgG Predicted, 39 kDa, observed, 39 kDa KDa ARG2 ARG2; Arginase 2; Arginase-2, Mitochondrial; Kidney-Type Arginase;
	Non-Hepatic Arginase; Arginase, Type II; Type II Arginase; Arginase II; EC 3.5.3.1; L-Arginine Amidinohydrolase; L-Arginine Ureahydrolase; Nonhepatic Arginase;
Immunogen	Kidney Arginase; EC 3.5.3 A synthesized peptide derived from human Arginase 2

KD-Validated Anti-Arginase 2 Rabbit Polyclonal Antibody - Additional Information

Gene ID 384 Other Names Arginase-2, mitochondrial, 3.5.3.1, Arginase II, Kidney-type arginase, Non-hepatic arginase, Type II arginase, ARG2

KD-Validated Anti-Arginase 2 Rabbit Polyclonal 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).

KD-Validated Anti-Arginase 2 Rabbit Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-Arginase 2 Rabbit Polyclonal Antibody - Images



Western blotting analysis using anti-arginase 2 antibody (Cat#AGI2115). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-arginase 2 antibody (Cat#AGI2115, 1:2,500) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-arginase 2 antibody (Cat #AGI2115). Arginase 2 expression in wild-type (WT) and arginase 2 (ARG2) shRNA knockdown (KD) HT-1080 cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-arginase 2 antibody (Cat #AGI2115, 1:2,500) and HRP-conjugated goat anti-rabbit secondary antibody (Cat #201, 1:20,000) respectively.