

**Arginase II Polyclonal Antibody**  
**Catalog # AP68495****Specification****Arginase II Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P78540</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

**Arginase II Polyclonal Antibody - Additional Information****Gene ID** 384**Other Names**

ARG2; Arginase-2; mitochondrial; Kidney-type arginase; Non-hepatic arginase; Type II arginase

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Arginase II 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:<a href="http://www.uniprot.org/citations/27745970" target="\_blank">27745970</a>). May suppress inflammation- related signaling in asthmatic airway epithelium (PubMed:<a href="http://www.uniprot.org/citations/27214549" target="\_blank">27214549</a>). 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:<a href="http://www.uniprot.org/citations/28614294" target="\_blank">28614294</a>). Regulates RPS6KB1 signaling, which promotes endothelial cell senescence and inflammation and implicates NOS3/eNOS dysfunction (PubMed:<a href="http://www.uniprot.org/citations/22928666" target="\_blank">22928666</a>). Can inhibit endothelial autophagy independently of its enzymatic activity implicating mTORC2 signaling (PubMed:<a href="http://www.uniprot.org/citations/22928666" target="\_blank">22928666</a>).

href="http://www.uniprot.org/citations/25484082" target="\_blank">25484082</a>). Involved in vascular smooth muscle cell senescence and apoptosis independently of its enzymatic activity (PubMed:<a href="http://www.uniprot.org/citations/23832324" target="\_blank">23832324</a>). 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:<a href="http://www.uniprot.org/citations/12859189" target="\_blank">12859189</a>).

#### Cellular Location

Mitochondrion.

#### Tissue Location

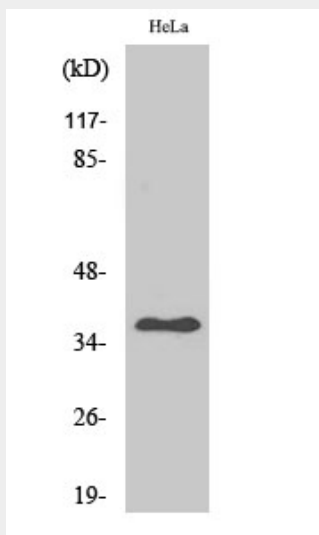
Expressed most strongly in kidney and prostate, much less strongly in the brain, skeletal muscle, placenta, lung, mammary gland, macrophage, uterus, testis and gut, but apparently not in the liver, heart and pancreas. Expressed in activated T cells (PubMed:27745970).

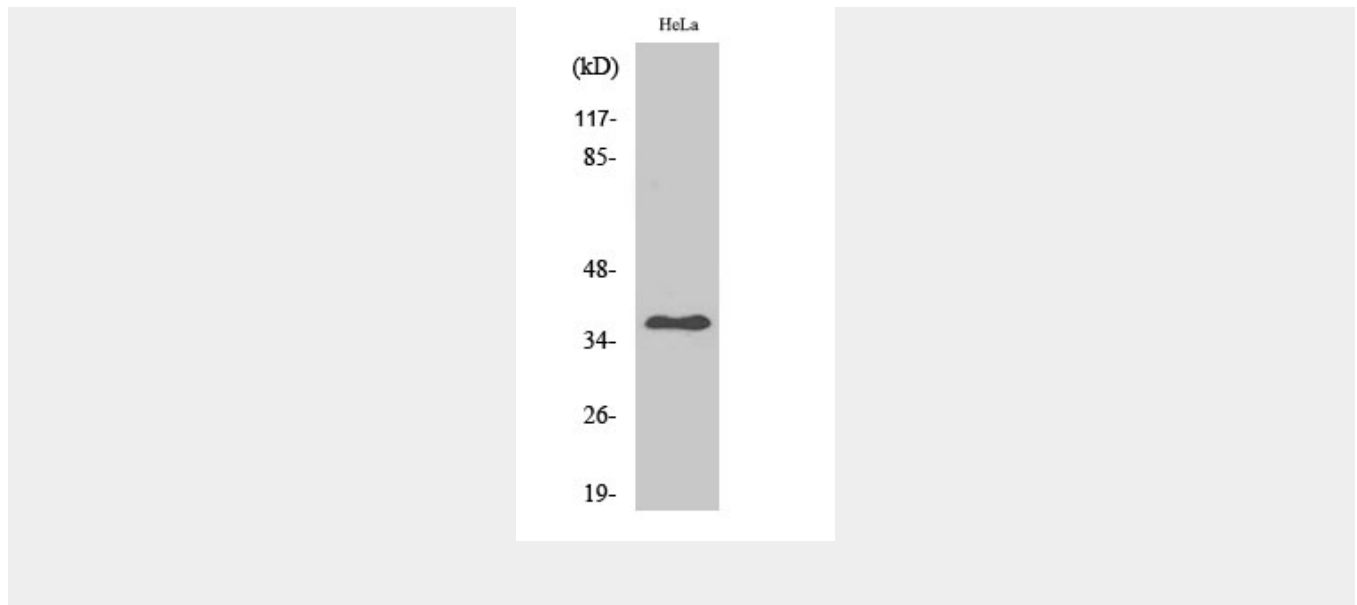
### Arginase II Polyclonal Antibody - Protocols

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](#)

### Arginase II Polyclonal Antibody - Images





### Arginase II Polyclonal Antibody - Background

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).