

**Arg2 Antibody**  
**Rabbit mAb**  
**Catalog # AP92564**

## Specification

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### Arg2 Antibody - Product Information

Application **WB, FC, ICC**  
Primary Accession **[P78540](#)**  
Clonality **Monoclonal**  
**Other Names**  
ARG2; Arginase-2; Type II arginase;

Isotype **Rabbit IgG**  
Host **Rabbit**  
Calculated MW **38578 Da**

### Arg2 Antibody - Additional Information

Dilution **WB~~1:1000**  
**FC~~1:10~50**  
**ICC~~N/A**  
Purification **Affinity-chromatography**  
Immunogen **A synthesized peptide derived from human Arg2**  
Description **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 NO synthase.**  
Storage Condition and Buffer **Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

### Arg2 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/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

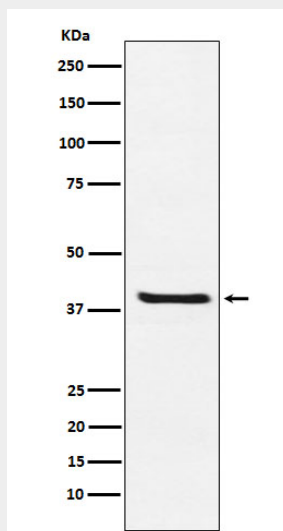
Expressed most strongly in kidney and prostate, much less strongly in the brain, skeletal muscle, placenta, lung, mammary gland, macrophage, uterus, testis and gut, but apparently not in the liver, heart and pancreas. Expressed in activated T cells (PubMed:27745970).

## Arg2 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](#)

## Arg2 Antibody - Images



Western blot analysis of Arg2 expression in 293T cell lysate.