

# ARG2 / Arginase 2 Antibody (aa180-348)

Rabbit Polyclonal Antibody Catalog # ALS16253

### **Specification**

## ARG2 / Arginase 2 Antibody (aa180-348) - Product Information

Application WB
Primary Accession P78540
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 39kDa KDa

#### ARG2 / Arginase 2 Antibody (aa180-348) - Additional Information

#### Gene ID 384

#### **Other Names**

Arginase-2, mitochondrial, 3.5.3.1, Kidney-type arginase, Non-hepatic arginase, Type II arginase, ARG2

### Target/Specificity

Human Arginase II / ARG2.

#### **Reconstitution & Storage**

Store at -20°C for up to one year.

#### **Precautions**

ARG2 / Arginase 2 Antibody (aa180-348) is for research use only and not for use in diagnostic or therapeutic procedures.

## ARG2 / Arginase 2 Antibody (aa180-348) - 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).

Volume

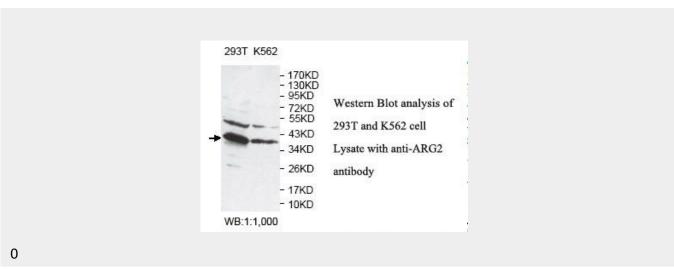
50 μl

# ARG2 / Arginase 2 Antibody (aa180-348) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

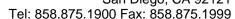
#### ARG2 / Arginase 2 Antibody (aa180-348) - Images



### ARG2 / Arginase 2 Antibody (aa180-348) - 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 NO synthase. Since NO synthase is found in the penile corpus cavernosum smooth muscle, the clitoral corpus cavernosum and the vagina, arginase II plays a role in both male and female sexual arousal. It is therefore a potential target for the treatment of male and female sexual arousal disorders.

# ARG2 / Arginase 2 Antibody (aa180-348) - References

Gotoh T., et al. FEBS Lett. 395:119-122(1996). Vockley J.G., et al. Genomics 38:118-123(1996). Morris S.M. Jr., et al. Gene 193:157-161(1997). Lee Y.T., et al. Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases. Halleck A., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.