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ARG2 / Arginase 2 Antibody (aa305-354)

Rabbit Polyclonal Antibody

Catalog # ALS16995

Specification

ARG2 / Arginase 2 Antibody (aa305-354) - Product Information

Application	**IHC, WB**
Primary Accession	P78540
Other Accession	384
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**38578**

ARG2 / Arginase 2 Antibody (aa305-354) - Additional Information

Gene ID 384

Other Names
ARG2, Arginase II, Kidney arginase, Nonhepatic arginase, Kidney-type arginase, L-arginine ureahydrolase, Type II arginase, Arginase 2, Arginase, type II, Arginase-2, mitochondrial, L-arginine amidinohydrolase, Non-hepatic arginase

Target/Specificity
ARG2 Antibodyantibody detects endogenous levels of ARG2.

Reconstitution & Storage
PBS, pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C.

Precautions
ARG2 / Arginase 2 Antibody (aa305-354) is for research use only and not for use in diagnostic or therapeutic procedures.

ARG2 / Arginase 2 Antibody (aa305-354) - 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).

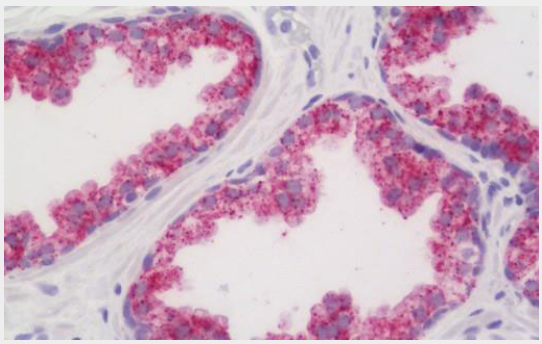
Volume
50 µl

ARG2 / Arginase 2 Antibody (aa305-354) - 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 (aa305-354) - Images



Anti-Arginase II / ARG2 antibody IHC staining of human prostate.

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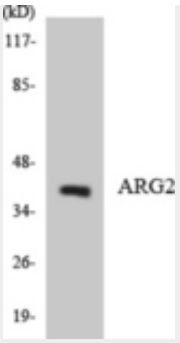

Western blot of the lysates from HeLa cells using ARG2 antibody.

ARG2 / Arginase 2 Antibody (aa305-354) - 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 (aa305-354) - 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.