

**Goat Anti-Arginase, type 1 / ARG1 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1096a

**Specification**

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**Goat Anti-Arginase, type 1 / ARG1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P05089</a>
Other Accession	<a href="#">NP_000036</a> , <a href="#">383</a>
Reactivity	Human, Mouse
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	34735

**Goat Anti-Arginase, type 1 / ARG1 Antibody - Additional Information**

**Gene ID** 383

**Other Names**

Arginase-1, 3.5.3.1, Liver-type arginase, Type I arginase, ARG1

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-Arginase, type 1 / ARG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Arginase, type 1 / ARG1 Antibody - Protein Information**

**Name** ARG1

**Function**

Key element of the urea cycle converting L-arginine to urea and L-ornithine, which is further metabolized into metabolites proline and polyamides that drive collagen synthesis and bioenergetic pathways critical for cell proliferation, respectively; the urea cycle takes place primarily in the liver and, to a lesser extent, in the kidneys.

**Cellular Location**

Cytoplasm. Cytoplasmic granule. Note=Localized in azurophil granules of neutrophils (PubMed:15546957)

#### Tissue Location

Within the immune system initially reported to be selectively expressed in granulocytes (polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409)

#### Goat Anti-Arginase, type 1 / ARG1 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](#)

#### Goat Anti-Arginase, type 1 / ARG1 Antibody - Images



AF1096a (0.01 µg/ml) staining of Human Liver lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### Goat Anti-Arginase, type 1 / ARG1 Antibody - Background

Arginase catalyzes the hydrolysis of arginine to ornithine and urea. At least two isoforms of mammalian arginase exist (types I and II) which differ in their tissue distribution, subcellular localization, immunologic crossreactivity and physiologic function. The type I isoform encoded by this gene, is a cytosolic enzyme and expressed predominantly in the liver as a component of the urea cycle. Inherited deficiency of this enzyme results in argininemia, an autosomal recessive disorder characterized by hyperammonemia.

#### Goat Anti-Arginase, type 1 / ARG1 Antibody - References

Arginase-1: a new immunohistochemical marker of hepatocytes and hepatocellular neoplasms. Yan BC, et al. Am J Surg Pathol, 2010 Aug. PMID 20661013.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Interleukin-9 polymorphism in infants with respiratory syncytial virus infection: an opposite effect in boys and girls. Schuurhof A, et al. Pediatr Pulmonol, 2010 Jun. PMID 20503287.

Association of haplotypes of inflammation-related genes with gastric preneoplastic lesions in African Americans and Caucasians. Zabaleta J, et al. Int J Cancer, 2010 Apr 14. PMID 20473875.

Human eosinophil granulocytes do not express the enzyme arginase. Luckner-Minden C, et al. J Leukoc Biol, 2010 Jun. PMID 20200399.