

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

## Specification

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

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>P05089</u> <u>NP\_000036</u>, <u>383</u> Human, Mouse Dog Goat Polyclonal 0.5 mg/ml IgG 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

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/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

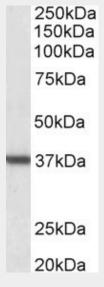
Within the immune system initially reported to be selectively expressed in granulocytes (polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409)

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

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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



AF1096a (0.01  $\mu$ g/ml) staining of Human Liver lysate (35  $\mu$ g 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 Thiazolinedinedione-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.