10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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	**WB**
Primary Accession	P05089
Other Accession	NP_000036, 383
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)

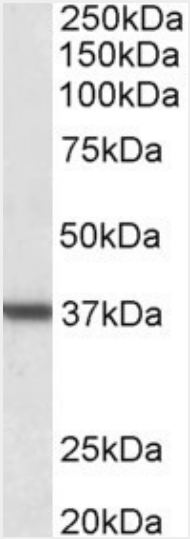
Tissue Location
Within the immune system initially reported to be selectively expressed in granulocytes (polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease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