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

Anti-liver Arginase Antibody

Catalog # ABO12753

Product Information

Application	WB
Primary Accession	P05089
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Arginase-1(ARG1) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	383
Other Names	Arginase-1, 3.5.3.1, Liver-type arginase, Type I arginase, ARG1
Calculated MW	34735
Application Details	Western blot, 0.1-0.5 □g/ml, Rat, Human
Subcellular Localization	Cytoplasm .
Source	Eukaryota
Protein Name	Arginase-1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human liver Arginase (64-92aa FQIVKNPRSVGKASEQLAGKVAEVKKNGR), different from the related mouse sequence by four amino acids, and from the related rat sequence by five amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the arginase family.

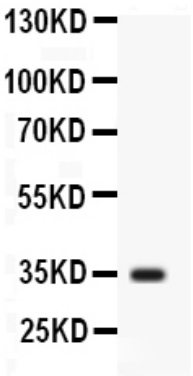
Protein Information

Name	ARG1
Function	Catalyzes the final step of the urea cycle by hydrolyzing L- arginine into urea, a nitrogenous waste product, and L-ornithine, a precursor to proline and polyamines; the urea cycle occurs primarily in the liver and, to a lesser extent, in the kidneys.
Cellular Location	Cytoplasm, cytosol. 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 in mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409)

Background

ARG1 (arginase, live) is a cytosolic enzyme and expressed predominantly in the liver as a component of the urea cycle. The isoform encoded by ARG1, referred to as the liver, or A-I, isoform, contributes 98% of the arginase activity in liver but is also present in red cells. Using a rat liver ARG1 cDNA clone to probe a human liver cDNA library, Haraguchi et al. (1987) isolated and characterized a cDNA corresponding to the ARG1 gene. The ARG1 gene is mapped on 6q23.2 and the arginase gene contains 8 exons. By immunologic studies, 90% of the arginase in red blood cell and liver was precipitated by the antibody, whereas only 50% of the arginase in kidney, brain, and the gastrointestinal tract reacted with it. Inherited deficiency of this enzyme results in argininemia, an autosomal recessive disorder characterized by hyperammonemia. Two transcript variants encoding different isoforms have been found for this gene.

Images



Anti- Liver Arginase antibody, ABO12753, Western blottingAll lanes: Anti Liver Arginase (ABO12753) at 0.5ug/mlWB: Rat Liver Tissue Lysate at 50ugPredicted bind size: 35KDObserved bind size: 35KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.