

## Anti-liver Arginase/ARG1 Antibody Picoband®

Catalog Number: RP1075

### About ARG1

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.

### Overview

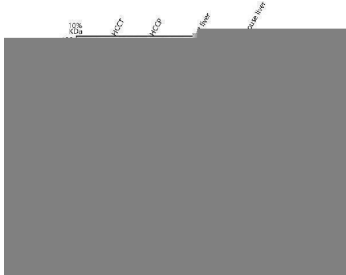
Product Name	Anti-liver Arginase/ARG1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-liver Arginase/ARG1 Antibody catalog # RP1075. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.01mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P05089

### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human liver Arginase, different from the related mouse sequence by four amino acids, and from the related rat sequence by five amino acids.
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Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

## Anti-liver Arginase/ARG1 Antibody Picoband® (RP1075) Images



Western blot analysis of Arginase-1/ARG1 using anti-Arginase-1/ARG1 antibody (RP1075). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human hepatocellular carcinoma tumor tissue (HCCT) lysates, Lane 2: human hepatocellular carcinoma paracancerous tissue (HCCP) lysates, Lane 3: rat liver tissue lysates, Lane 4: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Arginase-1/ARG1 antigen affinity purified polyclonal antibody (RP1075) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Arginase-1/ARG1 at approximately 38 kDa. The expected band size for Arginase-1/ARG1 is at 35 kDa.

## 1 Publications Citing This Product

1. PubMed ID: 30151392, Panax notoginseng Saponins Regulate Macrophage Polarization under Hyperglycemic Condition via NF- $\kappa$ B Signaling Pathway

Visit [bosterbio.com/anti-liver-arginase-antibody-rp1075-boster.html](http://bosterbio.com/anti-liver-arginase-antibody-rp1075-boster.html) to see all 1 publications.

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Anti-liver Arginase/ARG1 Antibody

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