

Basic Information

Product Name	Anti-Arginase-1/ARG1 Antibody (Clone#2B12)
Gene Name	ARG1
Source	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Species Reactivity	human, monkey, mouse, rat
Tested Application	WB, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human liver Arginase/ARG1 recombinant protein (Position: E25-D183).
Concentration	500 ug/ml
Purification	protein G purified.
Observed MW	35 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

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.

Reference

Anti-Arginase-1/ARG1 Antibody (Clone#2B12)被引用在2文献中。

Selected Validation Data

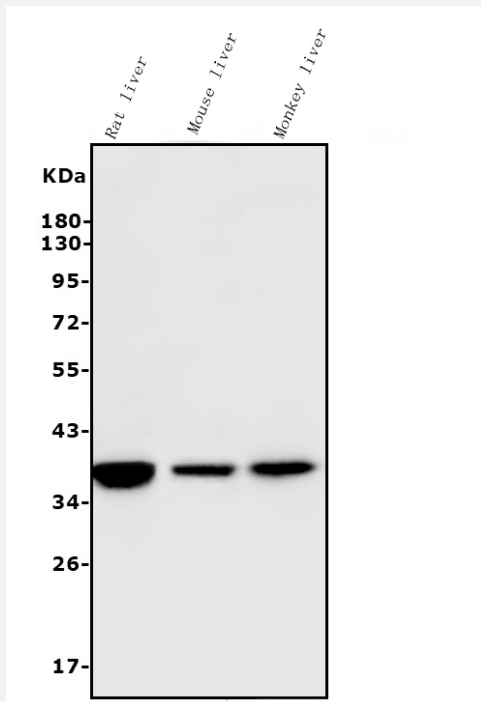


Figure 1. Western blot analysis of Arginase-1/ARG1 using anti-Arginase-1/ARG1 antibody (M01106-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat liver tissue lysates,

Lane 2: mouse liver tissue lysates,

Lane 3: monkey liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Arginase-1/ARG1 antigen affinity purified monoclonal antibody (M01106-4) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Arginase-1/ARG1 at approximately 35 kDa. The expected band size for Arginase-1/ARG1 is at 35 kDa.

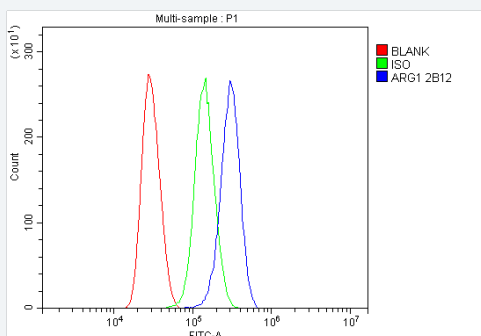


Figure 2. Flow Cytometry analysis of Jurkat cells using anti-Arginase-1/ARG1 antibody (M01106-4).

Overlay histogram showing Jurkat cells stained with M01106-4 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Arginase-1/ARG1 Antibody (M01106-4) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Product datasheet

**Anti-Arginase-1/ARG1 Antibody
(Clone#2B12)**

Catalog Number: M01106-4

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