

## Basic Information

<b>Product Name</b>	Anti-Arginase-1/ARG1 Antibody	
<b>Gene Name</b>	ARG1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, monkey, mouse, rat	
<b>Tested Application</b>	WB, IHC, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human liver Arginase/ARG1 recombinant protein (Position: E25-D183).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	35 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	ELISA:	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## 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<sup>o</sup>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被引用在8文献中。

## Selected Validation Data

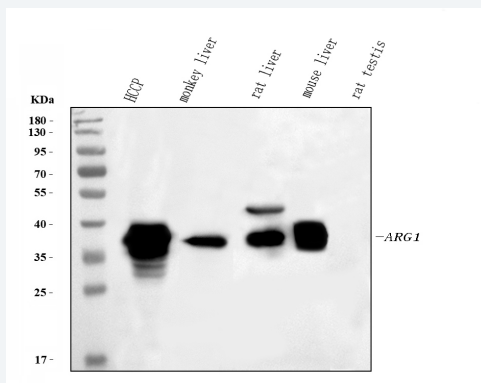


Figure 1. Western blot analysis of Arginase-1/ARG1 using anti-Arginase-1/ARG1 antibody (A01106). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HCCPrat liver tissue lysates,

Lane 2: monkey liver tissue lysates,

Lane 3: rat liver tissue lysates,

Lane 4: mouse liver tissue lysates,

Lane 5: rat testis tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Arginase-1/ARG1 antigen affinity purified polyclonal antibody (A01106) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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.

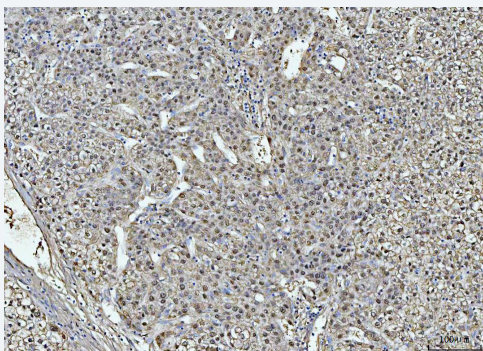


Figure 2. IHC analysis of Arginase-1/ARG1 using anti-Arginase-1/ARG1 antibody (A01106).

Arginase-1/ARG1 was detected in a paraffin-embedded section of human liver cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Arginase-1/ARG1 Antibody (A01106) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.