

# Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody

Catalog # ABO13304

Specification

## Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody - Product Information

Application WB, IP **Primary Accession** P05089 Rabbit Host Isotype Rabbit IgG Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

## Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 383

**Other Names** Arginase-1, 3.5.3.1, Liver-type arginase, Type I arginase, ARG1

Calculated MW 34735 MW KDa

Application Details WB 1:500-1:2000<br>IP 1:50

Subcellular Localization Cytoplasm.

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human ARG1

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-ARG1/Arginase 1 Rabbit Monoclonal 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)

## Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody - Images

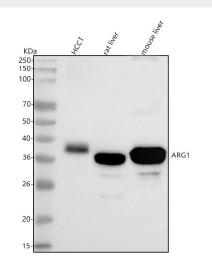


Figure 1. Western blot analysis of ARG1 using anti-ARG1 antibody (M01106-1).

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: rat liver tissue lysates,

Lane 3: 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-ARG1 antigen affinity purified monoclonal antibody (Catalog # M01106-1) at 1:500 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 1:1000 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 ARG1 at approximately 36, 38 kDa. The expected band size for ARG1 is at 35 kDa.