

# Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody

Catalog # ABO13304

## Product Information

---

|                          |                                                                                                                               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IP                                                                                                                        |
| <b>Primary Accession</b> | <a href="#">P05089</a>                                                                                                        |
| <b>Host</b>              | Rabbit                                                                                                                        |
| <b>Isotype</b>           | Rabbit IgG                                                                                                                    |
| <b>Reactivity</b>        | Rat, Human, Mouse                                                                                                             |
| <b>Clonality</b>         | Monoclonal                                                                                                                    |
| <b>Format</b>            | Liquid                                                                                                                        |
| <b>Description</b>       | Anti-ARG1/Arginase 1 Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat. |

## Additional Information

---

|                                 |                                                                                                                                            |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 383                                                                                                                                        |
| <b>Other Names</b>              | Arginase-1, 3.5.3.1, Liver-type arginase, Type I arginase, ARG1                                                                            |
| <b>Calculated MW</b>            | 34735                                                                                                                                      |
| <b>Application Details</b>      | WB 1:500-1:2000<br>IP 1:50                                                                                                                 |
| <b>Subcellular Localization</b> | Cytoplasm.                                                                                                                                 |
| <b>Source</b>                   | Eukaryota                                                                                                                                  |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                        |
| <b>Clone Names</b>              | Clone: ADG-1                                                                                                                               |
| <b>Immunogen</b>                | A synthesized peptide derived from human ARG1                                                                                              |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                    |
| <b>Storage</b>                  | 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. |

## Protein Information

---

|                 |                                                                                                                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>     | ARG1                                                                                                                                                                                                                        |
| <b>Function</b> | 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)

## Images

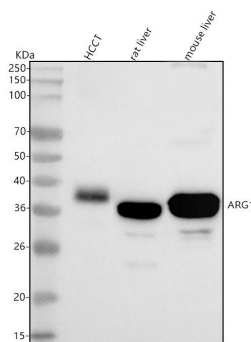


Figure 1. Western blot analysis of ARG1 using anti-ARG1 antibody (M01106-1).

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.

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