

**Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide  
Mouse Monoclonal Antibody [Clone ARG1/1125 + ARG1/1126 ]  
Catalog # AH11633**

**Specification**

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**Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Product Information**

|                   |  |
|-------------------|--|
| Application       | ,2,3,4,                                      |
| Primary Accession | <a href="#">P05089</a>                       |
| Other Accession   | <a href="#">383</a> , <a href="#">440934</a> |
| Reactivity        | Human  |
| Host              | Mouse  |
| Clonality         | Monoclonal                                   |
| Isotype           | Mouse / IgG's                                |
| Calculated MW     | 35-38kDa KDa                                 |

**Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Additional Information**

**Gene ID** 383

**Other Names**

Arginase-1, 3.5.3.1, Liver-type arginase, Type I arginase, ARG1

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - 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

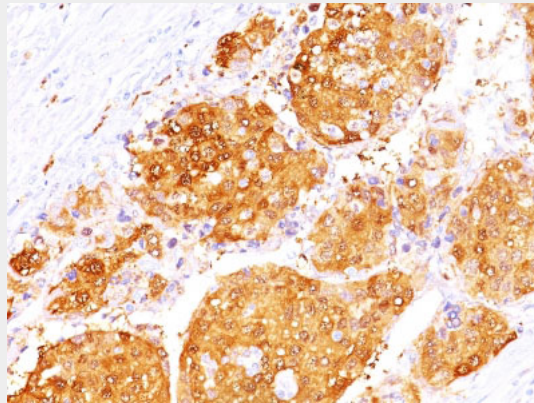
(polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409)

### **Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Images**



Formalin-fixed, paraffin-embedded human Hepatocellular Carcinoma stained with ARG1 Monoclonal Antibody (ARG1/1125 + ARG1/1126).

### **Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Background**

Recognizes a protein of 35-38kDa, which is identified as Arginase 1 (ARG1). Arginase is a manganese metallo-enzyme that catalyzes the hydrolysis of arginine to generate ornithine and urea. Arginase I and II are isoenzymes, which differ in subcellular localization, regulation, and possibly function. Arginase I is a cytosolic enzyme, which is expressed mainly in the liver as part of the urea cycle, whereas arginase II is a mitochondrial protein found in a variety of tissues. Antibody to ARG-1 labels hepatocytes in normal tissues and granulocytes in peripheral blood. ARG-1 is a sensitive and specific marker for identification of hepatocellular carcinoma.

### **Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - References**

Diez, A., et al. 1994. Immunological identity of the two different molecular mass constitutive subunits of liver arginase. *Biol. Chem. Hoppe Seyler* 375: 537-541