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

Mouse Monoclonal Antibody [Clone ARG1/1125]
Catalog # AH11627

Specification

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

Application	**,1,2,3,4,**
Primary Accession	P05089
Other Accession	383, 440934
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG3, kappa**
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

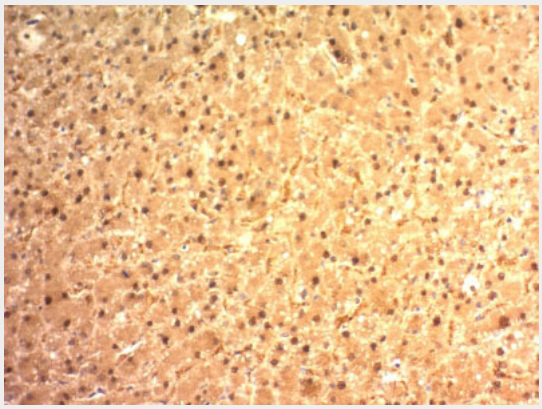
(polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409)

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

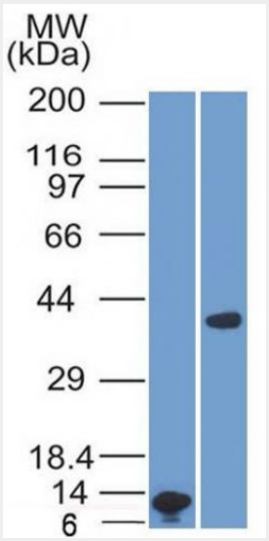
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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).



Western Blot Analysis A) Recombinant ARG1 Protein Fragment (B) human Liver Lysate using ARG1 Monoclonal Antibody (ARG1/1125).

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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