

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

Specification

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

Application IHC, IF, FC **Primary Accession** P05089 Other Accession 383, 440934 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

Application Note

IHC \sim 1:100 \sim 500<br \> <span class
="dilution IF">IF \sim 1:50 \sim 200<br \> FC \sim 1:10 \sim 50

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

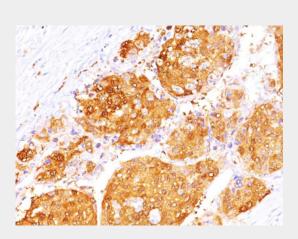
Within the immune system initially reported to be selectively expressed in granulocytes (polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409)

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
- <u>Immunoprecipitation</u>
- 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 + ARG1/1126).

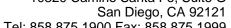
Arginase 1 (Hepatocellular Carcinoma Marker) Antibody - With BSA and Azide - Background

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