

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

Mouse Monoclonal Antibody [Clone ARG1/1125]

Catalog # AH11627

Product Information

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| Application | WB, IHC, IF, FC |
| Primary Accession | P05089 |
| Other Accession | 383 , 440934 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG3, kappa |
| Clone Names | ARG1/1125 |
| Calculated MW | 34735 |

Additional Information

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|-------------------------|--|
| Gene ID | 383 |
| Other Names | Arginase-1, 3.5.3.1, Liver-type arginase, Type I arginase, ARG1 |
| Application Note | WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50 |
| 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. |

Protein Information

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|--------------------------|---|
| 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 |

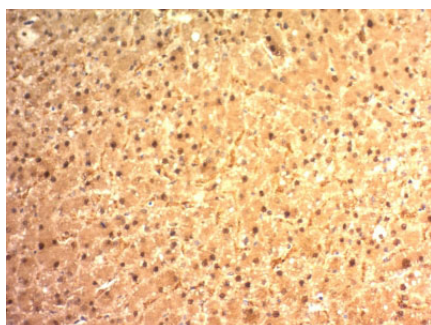
Background

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.

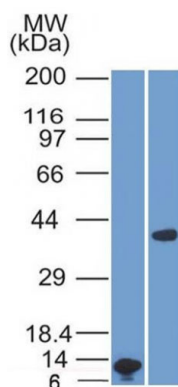
References

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

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).

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