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| --- | --- |
| Clone | ARG1/1125+ARG1/1126 |
| Source | Mouse Monoclonal |
| Cat #  | PM230-6ml RTUPM230-3ml RTUCM230-0.1ml ConcCM230-0.5ml Conc HAM230-3ml RTUHam230-6ml RTU |
| Regulatory Status | IVD |

**Arginase 1- (ARG1/1125+ARG1/1126)**

**Intended Use:**

This antibody is intended for use to qualitatively identify Arginase 1 antigen by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient’s clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

**Summary and Explanation:**

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.

**Immunogen:** Recombinant fragment 1-150) of human ARG1 protein

 **Isotype:** Mouse IgG

**Reagent Provided:
 Concentrated format:** Antibody to Arginase1 is diluted in antibody diluent, with 1% bovine serum
 albumin (BSA) and 0.05% sodium azide (NaN3). Recommended dilutions: 1:50 –
 1:100.The antibody dilution and protocol may vary depending on the specimen
 preparation and specific application. Optimal conditions should be
 determined by individual laboratory.

 **Pre-diluted format:** PathnSitu ready to use antibodies are pre tittered to optimal staining
 conditions. Further dilution may loose the activity and may yield to sub
 optimal staining.

**Storage Recommendations:** Store at 2°-8°C. Do not use after expiration date provided on the vial.

**Staining Recommendations:
 Antigen Retrieval Solution:** Use **Tris EDTA Buffer** **(PathnSitu Cat # PS009)** as antigen retrieval
 solution Heat Retrieval Method: Retrieve sections under steam pressure
 for 15 min using PathnSitu’s MERS (Multi Epitope Retrieval System) then
 allow solution to cool for 10 minutes then transfer tissue sections/slides to
 distilled water.

**Primary Antibody:**  Cover the tissue sections with primary antibody and incubate for 30
 min at room temperature when used PathnSitu PolyExcel Detection
 System.

**Detection System:** Refer to PathnSitu PolyExcel detection system protocol or manufacturer’s detection kit staining protocol when used other vendor detection system.

**Cellular Localization:** Cytoplasm

**Positive Control:** Hepatocellular Carcinoma

**Troubleshooting:** Follow the antibody specific protocol recommendations according to data sheet provided. If unusual results occur, contact PathnSitu Technical Support at 040-2701 5544 or techsupport@pathnsitu.com.

**Limitations and Warranty:** There are no warranties, expressed or implied, which extend beyond this
 description. PathnSitu is not liable for property damage, personal injury, or
 economic loss caused by this product.

**Bibliography:**  1. 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.