

Arginase1 (Hepatocellular Carcinoma Marker) Antibody

Mouse Monoclonal Antibody [Clone ARG1/12637]

| Catalog No | Format | Size |
|-----------------|--|--------|
| 383-MSM91-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 383-MSM91-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 383-MSM91-P1ABX | Purified Ab WITHOUT BSA or Azide at 1.0mg/ml | 100 ug |

| Applications | Tested Dillution | Note |
|----------------------------|------------------|---|
| Immunohistochemistry (IHC) | 1-2ug/ml | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB) | 2-4ug/ml | |

Product Details

| | |
|-------------------------------|---|
| Clone | ARG1/12637 |
| Immunogen | Recombinant human ARG1 protein |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype / Light Chain | IgG1 / Kappa |
| Mol. Weight of Antigen | 34.73kDa |
| Cellular Localization | Cytoplasm, Cytoplasmic granule |
| Species Reactivity | Human |
| Positive Control | Within the immune system initially reported to be selectively expressed in granulocytes (polymorphonuclear leukocytes [PMNs]) (PubMed:15546957) |

*Optimal dilution for a specific application should be determined.

Product Images for Arginase1 (Hepatocellular Carcinoma Marker) Antibody

Specificity & Comments

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., Functions in L-arginine homeostasis in nonhepatic tissues characterized by the competition between nitric oxide synthase (NOS) and arginase for the available intracellular substrate arginine. Arginine metabolism is a critical regulator of innate and adaptive immune responses. Involved in an antimicrobial effector pathway in polymorphonuclear granulocytes (PMN). Upon PMN cell death is liberated from the phagolysosome and depletes arginine in the microenvironment leading to suppressed T cell and natural killer (NK) cell proliferation and cytokine secretion (PubMed:15546957, PubMed:16709924, PubMed:19380772). In group 2 innate lymphoid cells (ILC2s) promotes acute type 2 inflammation in the lung and is involved in optimal ILC2 proliferation but not survival (By similarity). In humans, the immunological role in the monocytic/macrophage/dendritic cell (DC) lineage is unsure.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.