MONOCLONAL ANTIBODY TO
HUMAN ARGINASE 1
clone 6G3

Catalog no  
HM2162-1A (lot number and expiry date are indicated on the label)

Description  
Monoclonal antibody 6G3 reacts specifically with Arginase I, the final enzyme in the urea cycle, which is responsible for the hydrolysis of arginine to urea and ornithine. The highest concentration of the enzyme is present in the liver in which the bulk of ureagenesis occurs. Two types of arginases are known: Arginase I and II. The cytosolic enzyme found primarily in liver is Arginase I, a 35 kD protein that circulates as trimer. Arginase II is exclusively located in the mitochondrion. Arginase I is next to the liver in man also expressed by mature fetal and adult red blood cells and activated monocyte cells. During inflammation induction of Arginase I by inflammatory cytokines in monocyte cells is considered to lead to a local depletion of arginine resulting in a microenvironment that prevents nitric oxide production and arginine dependent T cell function. Arginase II is expressed by kidney, nucleated red blood cells, brain, spinal cord, gastro-intestinal tract, mammary gland and prostate. Enhanced circulating Arginase I levels have been reported after surgery, following haemorrhage and in asthmatic patients. Measurement of circulating Arginase I has been used experimentally as rapid marker for liver injury.

Species  
Mouse IgG1

Formulation  
0.5 mg of 0.2 µm filtered antibody solution in PBS (exact concentration is indicated on the label).

Application  
The monoclonal antibody 6G3 can be used for immunoprecipitation and flow cytometry. Furthermore the monoclonal antibody 6G3 is useful as coating in immuno assays.

Storage and stability  
Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year. The exact expiry date is indicated on the label

Precautions  
For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

References  
3. Luckner-Minden, C et al; Human eosinophil granulocytes do not express the enzyme arginase, JLB 2010, 87:1125  
5. Abebe, T et al; Local Increase of Arginase Activity in Lesions of Patients with Cutaneous Leishmaniasis in Ethiopia, PlosOne 2012, 6:e1684  
6. Abebe, T et al; Arginase Activity - A Marker of Disease Status in Patients with Visceral Leishmaniasis in Ethiopia, PlosOne 2013, 7: e2134  

Also available  
HM2049  Monoclonal antibody against Human L-FABP, clone L2B10  
HM2163  Monoclonal antibody against Human Arginase 1, clone 9C5  
HM3020  Monoclonal antibody against rat ASGPR, clone 8D7 (cross reactive with human)