

Product datasheet for **DM2010**

Arginase 1 (ARG1) Mouse Monoclonal Antibody [Clone ID: 6G3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	6G3
Applications:	ELISA, WB
Recommended Dilution:	ELISA. Western Blot.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant Human liver-type Arginase produced in <i>E. coli</i> .
Specificity:	The Anti Human Arginase, Clone 6G3 is a Mouse monoclonal antibody against recombinant Human Arginase-liver type Arginase.
Formulation:	0.05M Phosphate buffer, 0.1M NaCl, pH 7.2 State: Purified State: Lyophilized purified IgG fraction Preservative: None
Reconstitution Method:	Add 0.1 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	arginase 1



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Database Link: [Entrez Gene 383 Human P05089](#)

Background: Arginase [EC 3.5.3.1; L-arginine aminohydrolase] is an enzyme that hydrolyzes L-arginine to L-ornithine and urea in the urea cycle. Two forms of arginase exist which are designed as arginase I and arginase II. Liver-type arginase I is expressed primarily in the liver and to some extent in the erythrocytes. Arginase II is expressed in many extrahepatic tissues, such as brain, spinal cord, kidney, small intestine and mammary gland. Although arginase I and arginase II have similar enzyme activities, they have different pI, immunological reactivity and are encoded by different genes. Human arginase I is a 35 kDa protein circulating in blood probably as a homotrimer. Circulating liver-type arginase was clinically used as a liver-specific marker which may reflect not only early occurrence of liver injury but also early termination of liver injury. The measurement of liver-type arginase is clinically applicable for monitoring conditions of patients with liver disorders or pre- and postoperative conditions of patients who received partial hepatectomy with quicker normalization in comparison with aminotransferases (ALT and AST). Recently, arginase I gene was found to be one of the most prominent among asthma genes. In situ hybridization demonstrated marked staining of arginase I in submucosal inflammatory lesions and arginase activity increased in allergen-challenged lungs. Finally, it was found that both arginase I was the most significantly up-regulated protein in the murine spinal cord during experimental autoimmune encephalomyelitis. The results indicated that arginase I played important roles in autoimmune inflammation in the central nervous system.

Synonyms: Type I arginase, Liver-type arginase, ARG1