Best Tools for immunology Research

Arginase-1 (ABT97R) rabbit mAb

Catalog No :	YM7014
Reactivity :	Human;
Applications :	IHC;WB; ELISA
Target :	Arginase I
Fields :	>>Arginine biosynthesis;>>Arginine and proline metabolism;>>Metabolic pathways;>>Biosynthesis of amino acids;>>Amoebiasis
Gene Name :	ARG1
Protein Name :	Arginase-1
Human Gene Id :	383
Human Swiss Prot No :	P05089
Immunogen :	Synthesized peptide derived from human Arginase-1 AA range:200-322
Specificity :	This antibody detects endogenous levels of Arginase I
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, Rabbit IgG1, Kappa
Dilution :	IHC 1:100-500, WB 1:500-1000, ELISA 1:5000-20000
Purification :	Recombinant Expression and Affinity purified
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	35kD
Background :	Arginase catalyzes the hydrolysis of arginine to ornithine and urea. At least two isoforms of mammalian arginase exist (types I and II) which differ in their tissue distribution, subcellular localization, immunologic crossreactivity and physiologic

function. The type I isoform encoded by this gene, is a cytosolic enzyme and expressed predominantly in the liver as a component of the urea cycle. Inherited deficiency of this enzyme results in argininemia, an autosomal recessive disorder characterized by hyperammonemia. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011],

Function : catalytic activity:L-arginine + H(2)O = L-ornithine + urea.,cofactor:Binds 2 manganese ions per subunit.,disease:Defects in ARG1 are the cause of argininemia (ARGIN) [MIM:207800]; also known as hyperargininemia. Argininemia is a rare autosomal recessive disorder of the urea cycle. Arginine is elevated in the blood and cerebrospinal fluid, and periodic hyperammonemia occurs. Clinical manifestations include developmental delay, seizures, mental retardation, hypotonia, ataxia, progressive spastic quadriplegia.,induction:By arginine or homoarginine.,online information:Arginase entry,pathway:Nitrogen metabolism; urea cycle; L-ornithine and urea from L-arginine: step 1/1.,similarity:Belongs to the arginase family.,subunit:Homotrimer.,

Subcellular Location : Nuclear

Expression : Within the immune system initially reported to be selectively expressed in granulocytes (polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409).

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