



Arginase-1(ABT-Arg1) mouse mAb

Catalog No	YP-Ab-15450
Isotype	IgG
Reactivity	Human
Applications	IHC,WB
Gene Name	ARG1
Protein Name	Arginase-1 (EC 3.5.3.1) (Liver-type arginase) (Type I arginase)
Immunogen	Synthesized peptide derived from human Arginase-1
Specificity	This antibody detects endogenous levels of human Arginase-1 (EC 3.5.3.1) (Liver-type arginase) (Type I arginase). Heat-induced epitope retrieval (HIER) TRIS-EDTA of pH8.0 was highly recommended as ant
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Mouse, Monoclonal/IgG2b, Kappa
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p 1:100-500, WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	
Cell Pathway	Cytoplasm . Cytoplasmic granule . Localized in azurophil granules of neutrophils (PubMed:15546957). .
Tissue Specificity	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).
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.,



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],

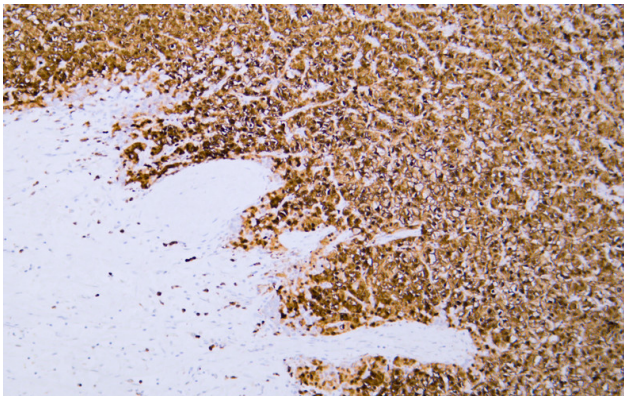
matters needing attention

Avoid repeated freezing and thawing!

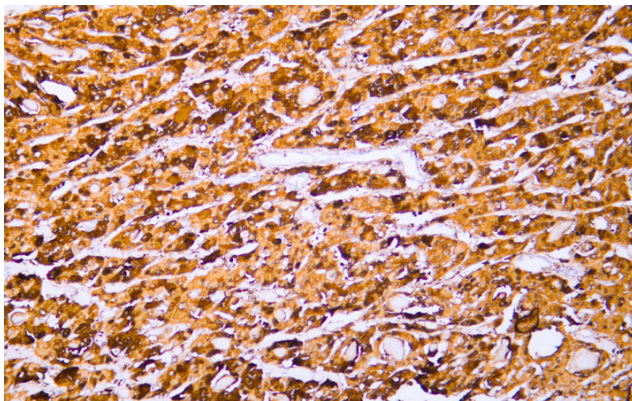
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

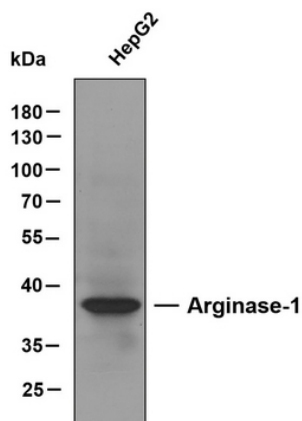
Products Images



Human hepatocellular carcinoma tissue was stained with anti-Arginase-1(ABT-Arg1) antibody.



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Whole cell lysates of HepG2 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-Arginase-1 antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody. Predicted band size: 35 kDa