

Mouse Anti-Arginase-1/ARG-1 [ARG1/1125]: MC0270, MC0270RTU7

Intended Use: For Research Use Only

Description: Arginase is a manganese metalloenzyme that catalyzes the hydrolysis of arginine to generate ornithine and urea. Arginase I and II are isoenzymes which differ in subcellular localization, regulation, and possibly function. Arginase I is a cytosolic enzyme, which is expressed mainly in the liver as part of the urea cycle, whereas arginase II is a mitochondrial protein found in a variety of tissues. Antibody to ARG-1 labels hepatocytes in normal tissues and granulocytes in peripheral blood. ARG-1 is a sensitive and specific marker for identification of hepatocellular carcinoma.

Specifications:

Clone: ARG1/1125
Source: Mouse
Isotype: IgG3k
Reactivity: Human
Immunogen: Recombinant human ARG1 protein fragment aa11-97
Localization: Cytoplasm, nucleus
Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, WB
Package:

Description	Catalog No.	Size
Arginase-1/ARG-1 Concentrated	MC0270	1 ml
Arginase-1/ARG-1 Prediluted	MC0270RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: HCC, normal liver
Concentrated Dilution: 25-100
Pretreatment: Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human HCC stained with anti-Arginase-1 using DAB

References:

1. Arginase-1 is a novel immunohistochemical marker of hepatocellular differentiation. Ordóñez NG. Adv Anat Pathol 21:285-90, 2014.
2. Liver-specific knockout of arginase-1 leads to a profound phenotype similar to inducible whole body arginase-1 deficiency. Ballantyne LL, et al. Mol Genet Metab Rep 9:54-60, 2016.
3. Inducible arginase 1 deficiency in mice leads to hyperargininemia and altered amino acid metabolism. Sin YY, et al. PLoS One 8:e80001, 2013.

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