

36-2645: Anti-Arginase 1 (Hepatocellular Carcinoma Marker) Monoclonal Antibody(Clone: ARG1/1125)

Clonality :	Monoclonal
Clone Name :	ARG1/1125
Application :	WB,IHC
Reactivity :	Human
Gene :	ARG1
Gene ID :	383
Uniprot ID :	P05089
Alternative Name :	Arginase 1; ARG1; liver-type arginase; type I arginase
Isotype :	Mouse IgG3, kappa
Immunogen Information :	Recombinant human ARG1 protein fragment (around aa11-97) (exact sequence is proprietary)

Description

Recognizes a protein of 35-38kDa, which is identified as Arginase 1 (ARG1). Arginase is a manganese metallo-enzyme 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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Western Blotting (1-2ug/ml); Immunohistology (Formalin-fixed) (2-4ug/ml for 30 minutes at RT) ,(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),

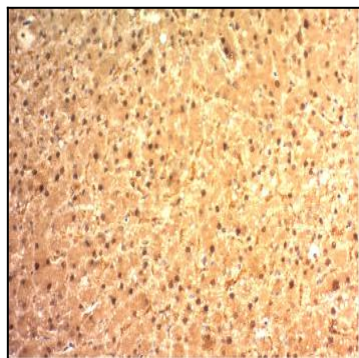


Fig. 1: Formalin-fixed, paraffin-embedded human Hepatocellular Carcinoma stained with ARG1 Mouse Monoclonal Antibody (ARG1/1125).

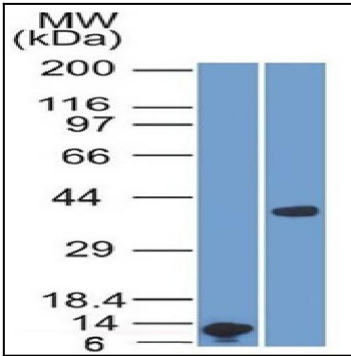


Fig. 2: Western Blot Analysis A) Recombinant ARG1 Protein Fragment (B) human Liver lysate Using ARG1 Mouse Monoclonal Antibody (ARG1/1125).

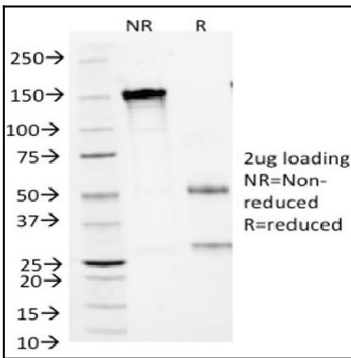


Fig. 3: SDS-PAGE Analysis Purified ARG1 Mouse Monoclonal Antibody (ARG1/1125). Confirmation of Integrity and Purity of Antibody.

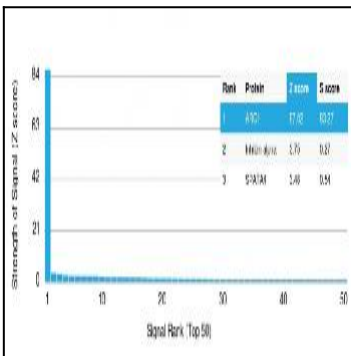


Fig. 4: Analysis of Protein Array containing more than 19,000 full-length human proteins using Arginase-1 Mouse Monoclonal Antibody (ARG1/1125). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.