

Mouse anti-Human Renal Cell Carcinoma Monoclonal Antibody | anti-CA9 antibody

Renal Cell Carcinoma (Carbonic Anhydrase IX)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA215402	Mouse	Human	Immunohistochemistry, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

Renal Cell Carcinoma; Monoclonal Antibody; Renal Cell Carcinoma (Carbonic Anhydrase IX); CA9; CAIX; Carbonate dehydratase IX; Carbonic anhydrase 9; Carbonic anhydrase IX; G250; Membrane antigen MN; P54/58N; pMW1; RCC-associated antigen G250; Renal cell carcinoma-associated antigen G250; anti-CA9 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2b, kappa
Clone Number	CA9/3405
Specificity	Recognizes a glycoprotein of ~200kDa, identified as carbonic anhydrase IX (CAIX/gp200). In normal kidney, gp200 is localized along the brush border of the pars convoluta and pars recta segments of the proximal tubule, as well as focally along the luminal surface of Bowmans capsule adjoining the outgoing proximal tubule. Reportedly, gp200 is expressed by 93% of primary and 84% of metastatic renal cell carcinomas. This MAb may be useful in the investigations of carcinomas of proximal nephrogenic differentiation especially those showing tubular differentiation.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml or Purified Ab with BSA and Azide at 200ug/ml or Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/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.
Sequence Length	459
Applicable Applications for anti-CA9 antibody	IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Immunogen	Recombinant Human CA9 protein fragment (around aa 314-410) (exact sequence is proprietary)
Cellular Localization	Cell Surfaceand Cytoplasmic
Hu-chromosome Location	9p13.3
Positive Control	U87 cells. Normal kidney or Renal cell carcinoma (IHC).
Preparation and Storage	Antibody with azide: store at 2 to 8 degree C. Antibody without azide: store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



FCM/FACS (Flow Cytometry)
Flow Cytometric Analysis of PFA-fixed U87 cells using CAIX-Monospecific Mouse Monoclonal Antibody (CA9/3405) followed by goat anti-mouse IgG-CF488 (Blue); Isotype Control (Red).



Application Data
Analysis of Protein Array containing more than 19,000 full-length human proteins using CAIX-Monospecific Mouse Monoclonal Antibody (CA9/3405). 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 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.



SDS-PAGE
SDS-PAGE Analysis Purified CAIX-Monospecific Mouse Monoclonal Antibody (CA9/3405). Confirmation of Integrity and Purity of Antibody.



IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma Stained with CAIX-Monospecific Mouse Monoclonal Antibody (CA9/3405).

ADDITIONAL INFORMATION

References	Yoshida SO, et. al. Cancer Research, 1989, 49(7):1802-9.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	119578763
NCBI GeneID	768
UniProt Accession #	Q16790
Molecular Weight	55kDa
NCBI Official Full Name	carbonic anhydrase IX
NCBI Official Synonym Full Names	carbonic anhydrase 9
NCBI Official Symbol	CA9
NCBI Official Synonym Symbols	MN; CAIX
NCBI Protein Information	carbonic anhydrase 9
UniProt Protein Name	Carbonic anhydrase 9
UniProt Gene Name	CA9
UniProt Synonym Gene Names	G250; MN; CA-IX; CAIX; RCC-associated antigen G250

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.