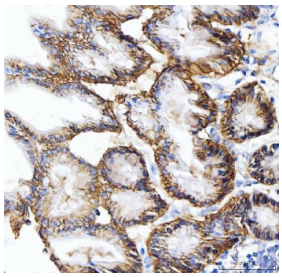
Carbonic Anhydrase IX Antibody / CA9 (RQ7219)

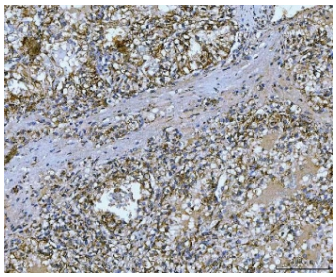
Catalog No.	Formulation	Size
RQ7219	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

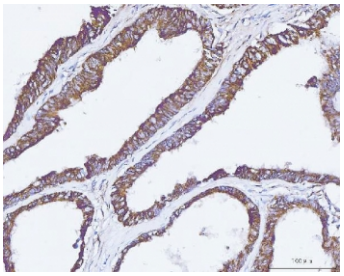
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q16790
Localization	Cell surface and cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Carbonic Anhydrase IX antibody is available for research use only.



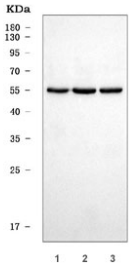
IHC staining of FFPE mouse stomach tissue with Carbonic Anhydrase IX antibody.
HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



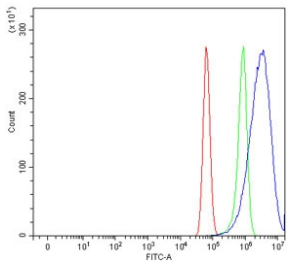
IHC staining of FFPE human renal adenocarcinoma tissue with Carbonic Anhydrase IX antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



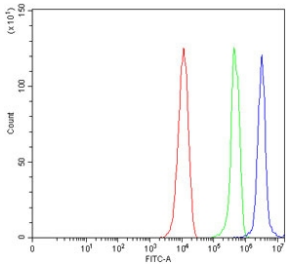
IHC staining of FFPE human colonic adenocarcinoma tissue with Carbonic Anhydrase IX antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) U-87 MG, 2) 293T and 3) HeLa cell lysate with Carbonic Anhydrase IX antibody. Predicted molecular weight: 50-55 kDa but may be observed at higher molecular weights due to glycosylation.



Flow cytometry testing of human U-87 MG cells with Carbonic Anhydrase IX antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Carbonic Anhydrase IX antibody.



Flow cytometry testing of mouse RAW264.7 cells with Carbonic Anhydrase IX antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Carbonic Anhydrase IX antibody.

Description

Carbonic anhydrase IX (CA9/CA IX) is an enzyme that in humans is encoded by the CA9 gene. Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA IX is a transmembrane protein and is one of only two tumor-associated carbonic anhydrase isoenzymes known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12.

Application Notes

Optimal dilution of the Carbonic Anhydrase IX antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids D146-D414) was used as the immunogen for the Carbonic Anhydrase IX antibody.

Storage

After reconstitution, the Carbonic Anhydrase IX antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com