

CA9 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1500a

Specification

CA9 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC, FC |
| Primary Accession | Q16790 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG1 |
| Calculated MW | 50kDa KDa |

Description

CA IX is a transmembrane protein and the only tumor-associated carbonic anhydrase isoenzyme 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. Reversible hydration of carbon dioxide. Participates in pH regulation. May be involved in the control of cell proliferation and transformation. Appears to be a novel specific biomarker for a cervical neoplasia. Tissue specificity: Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa.

Immunogen

Purified recombinant fragment of human CA9 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

CA9 Antibody - Additional Information

Gene ID 768

Other Names

Carbonic anhydrase 9, 4.2.1.1, Carbonate dehydratase IX, Carbonic anhydrase IX, CA-IX, CAIX, Membrane antigen MN, P54/58N, Renal cell carcinoma-associated antigen G250, RCC-associated antigen G250, pMW1, CA9, G250, MN

Dilution

WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CA9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CA9 Antibody - Protein Information

Name CA9

Synonyms G250, MN

Function

Catalyzes the interconversion between carbon dioxide and water and the dissociated ions of carbonic acid (i.e. bicarbonate and hydrogen ions).

Cellular Location

Nucleus. Nucleus, nucleolus. Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus membrane; Single-pass type I membrane protein. Note=Found on the surface microvilli and in the nucleus, particularly in nucleolus

Tissue Location

Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa

CA9 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CA9 Antibody - Images

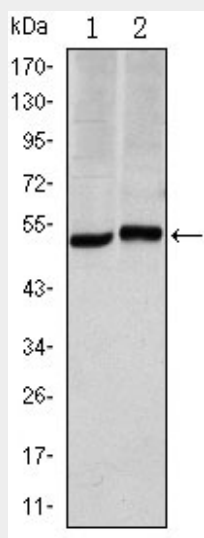


Figure 1: Western blot analysis using CA9 mouse mAb against HeLa (1) and A549 (2) cell lysate.

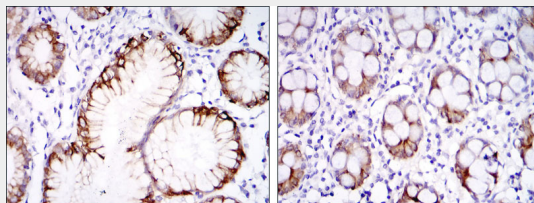


Figure 2: Immunohistochemical analysis of paraffin-embedded stomach tissues (left) and colon tissues (right) using CA9 mouse mAb with DAB staining.

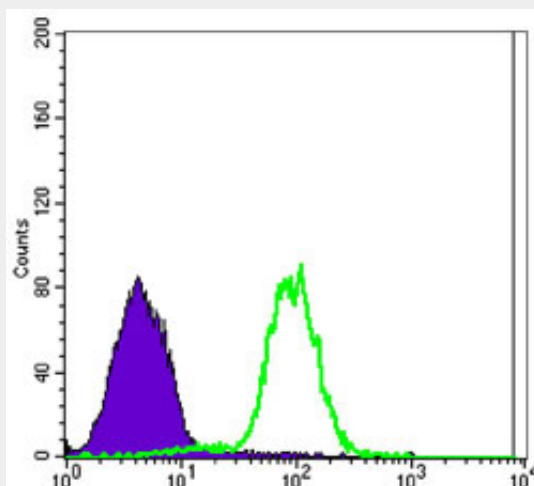


Figure 3: Flow cytometric analysis of NTERA-2 cells using CA9 mouse mAb (green) and negative control (purple).

CA9 Antibody - References

1. Br J Cancer. 2008 Sep 2;99(5):727-33.
2. Pathol Res Pract. 2009;205(1):1-9.