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CA9 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1500a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q16790
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2D3
Isotype	IgG1
Calculated MW	49698
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.

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 E~~N/A
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.

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

References

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

Images

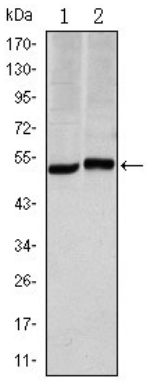


Figure 1: Western blot analysis using CA9 mouse mAb against Hela (1) and A549 (2) cell lysate.

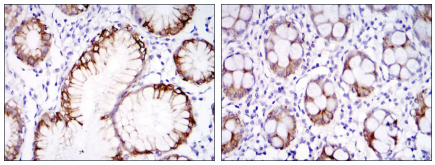


Figure 2: Immunohistochemical analysis of paraffin-embedded stomach tissues (left) and colon tissues (right) using CA9 mouse mAb with DAB staining.

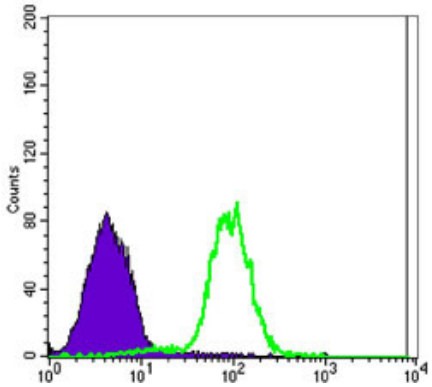


Figure 3: Flow cytometric analysis of NTERA-2 cells using CA9 mouse mAb (green) and negative control (purple).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.