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Product datasheet for TA336805

Carbonic Anhydrase IX (CA9) Mouse Monoclonal Antibody [Clone ID: 2D3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	2D3
Applications:	CyTOF-ready, ELISA, FC, ICC/IF, IHC, WB
Recommended Dilution:	Flow (Intracellular): 1 ug/mL, Immunocytochemistry/ Immunofluorescence, Western Blot: 1:2000, ELISA: 1:10000, Flow Cytometry: 1:200 - 1:400, Immunohistochemistry: 1:10 - 1:500, Immunohistochemistry-Paraffin: 1:200 - 1:1000, CyTOF-ready
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human Carbonic Anhydrase IX expressed in E. coli. [UniProt# Q16790]
Formulation:	PBS with 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	IgG purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	50 kDa
Gene Name:	carbonic anhydrase 9
Database Link:	NP_001207 Entrez Gene 768 Human Q16790

View online »

Background: Carbonic Anhydrase IX, also known as CA9, 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.

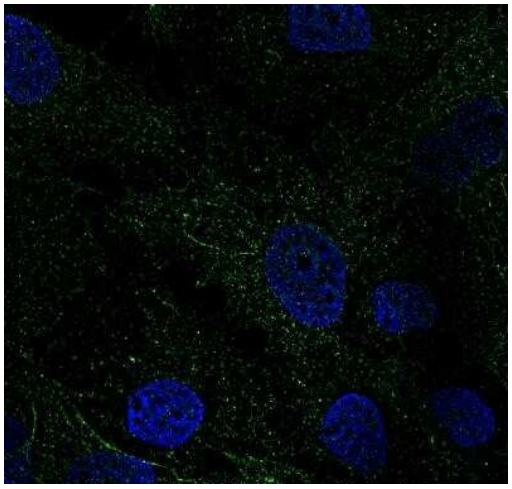
Synonyms: CAIX; MN

Note: This Carbonic Anhydrase IX (2D3) antibody is useful for Western blot, Flow Cytometry, Immunohistochemistry on paraffin-embedded sections and ELISA.

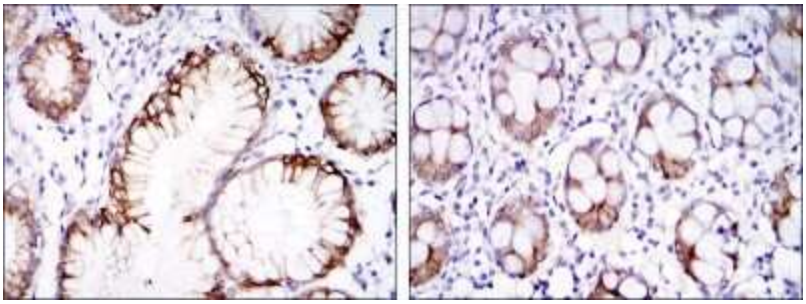
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Nitrogen metabolism

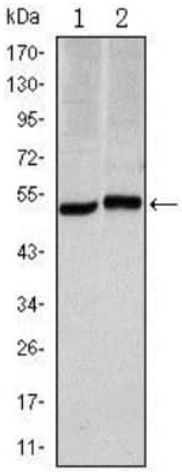
Product images:



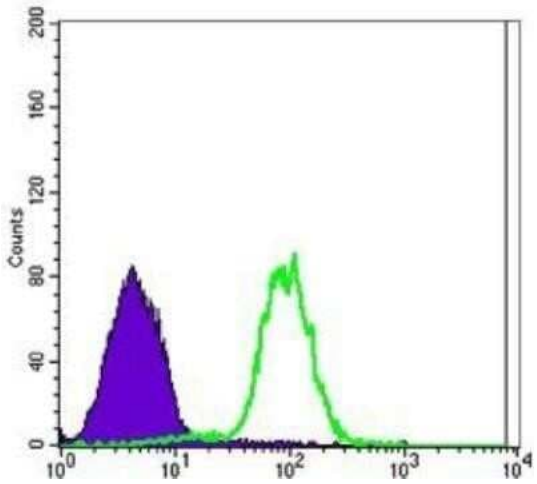
Immunocytochemistry/Immunofluorescence: Carbonic Anhydrase IX/CA9 Antibody (2D3) - BSA Free TA336805 - A431 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with Carbonic Anhydrase IX/CA9 Antibody [2D3] (TA336805) at 2ug/ml overnight at 4C and detected with an anti-mouse DyLight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



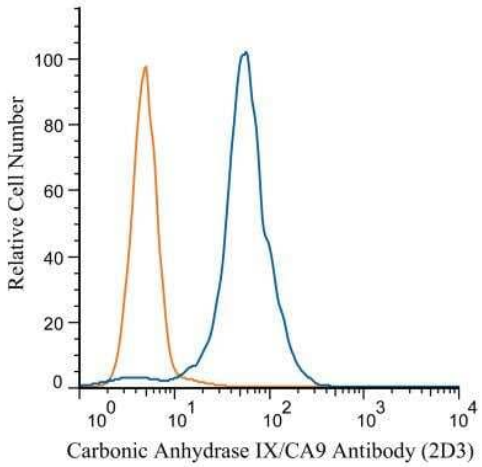
Immunohistochemistry-Paraffin: Carbonic Anhydrase IX/CA9 Antibody (2D3) TA336805 - Paraffin-embedded lung tissues (left) and colonic tissues (right) using Carbonic Anhydrase IX mouse antibody with DAB staining.



Western Blot: Carbonic Anhydrase IX/CA9 Antibody (2D3) TA336805 - Carbonic Anhydrase IX mouse antibody against Hela (1) and A549 (2) cell lysates. Bands were detected at a molecular weight of approximately 50 kDa in both cell lines.



Flow Cytometry: Carbonic Anhydrase IX/CA9 Antibody (2D3) TA336805 - Analysis of NTERA-2 cells using Carbonic Anhydrase IX mouse mAb (green) and negative control (purple).



Flow Cytometry: Carbonic Anhydrase IX/CA9 Antibody (2D3) TA336805 - A surface stain was performed on A431 cells with Carbonic Anhydrase IX/CA9 TA336805 (blue) and a matched isotype control NBP2-27287 (orange). Cells were incubated in an antibody dilution of 1 ug/mL for 20 minutes at room temperature, followed by DyLight488-conjugated anti-mouse secondary antibody.