

Product datasheet for **CF500623**

Carbonic Anhydrase IX (CA9) Mouse Monoclonal Antibody [Clone ID: OTI1G7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1G7
Applications:	FC, IHC
Recommended Dilution:	IHC 1:50, Flow 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full-length protein expressed in 293T cell transfected with human CA9 expression vector
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	49.7 kDa
Gene Name:	carbonic anhydrase 9
Database Link:	NP_001207 Entrez Gene 768 Human Q16790



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Background:

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 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. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12.

Synonyms:

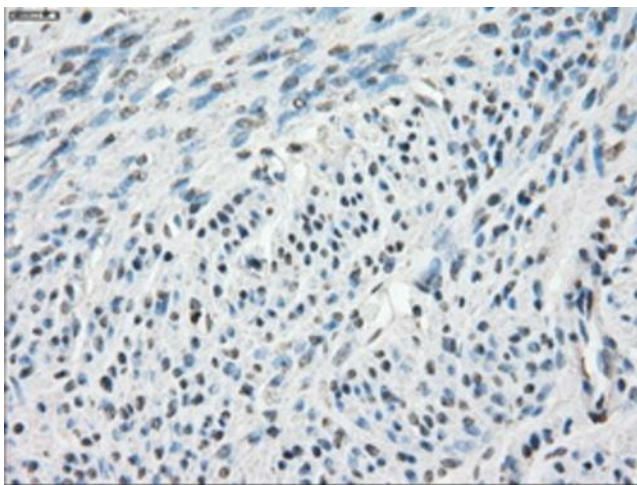
CAIX; MN

Protein Families:

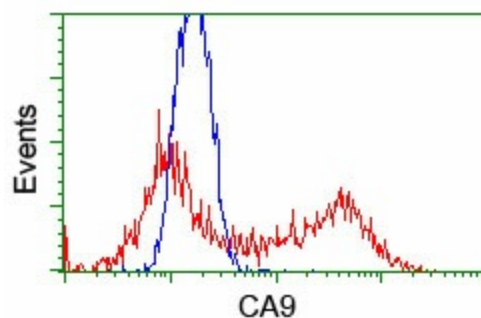
Druggable Genome, Transmembrane

Protein Pathways:

Nitrogen metabolism

Product images:

Immunohistochemical staining of paraffin-embedded endometrium tissue within the normal limits using anti-CA9 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



HEK293T cells transfected with either pCMV6-ENTRY CA9 ([RC204839]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-CA9 mouse monoclonal ([TA500623], Dilution 1:1,000), and then analyzed by flow cytometry.