

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **Product datasheet for TA500623**

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

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI1G7

**Applications:** FC, IHC, WB

**Recommend Dilution:** WB 1:2000, 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:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

**Predicted Protein Size:** 49.7 kDa

**Gene Name:** carbonic anhydrase 9

Database Link: NP 001207 Entrez Gene 768 Human

**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-basebalance, 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

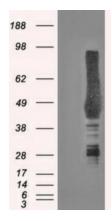
**Protein Families:** Druggable Genome, Transmembrane



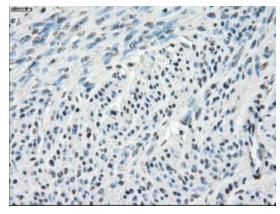


**Protein Pathways:** Nitrogen metabolism

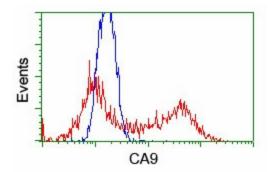
## **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CA9 ([RC204839], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CA9. Positive lysates [LY400485] (100ug) and [LC400485] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffinembedded endometrium tissue within the normal limits using anti-CA9mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500623, Dilution 1:50)



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.