

**Name:** Purified anti-CA9 (Carbonic Anhydrase IX) mouse monoclonal antibody, clone 1G7

**Catalog:** TA500623

**Product Data Sheet**

**Gene Name:** Homo sapiens carbonic anhydrase IX (CA9)  
**GeneBank accession:** NM\_001216  
**Isotype:** IgG2b

**Reactivity:** Human  
**Test application:** WB  
**Clone Name:** clone 1G7

**Gene Synonym:** CAIX; MN

**Validation Data:**

**Guaranteed Applications:** WB, IHC, FC

**Western Blot**

**Suggested Dilutions:** WB 1:2000, IHC 1:50, Flow 1:100

**Immunogen:** Protein expressed in 293T cell transfected with human CA9 expression vector

**Components:**

- Purified anti-CA9 (Carbonic Anhydrase IX) mouse monoclonal antibody, clone 1G7 (TA500623)
- 1 vial of 20ug myc-DDK tagged CA9 HEK293T over-expression lysate lyophilized in RIPA buffer (LY400485) (Reconstitute into 20ul of 1x SDS sample buffer before loading)

**Amount:**

TA500623-100 100ul

**Concentration:** 0.5~1.0 mg/ml (Lot Dependent)

**Storage Condition:** Shipped at 4C. Upon delivery store at -20C. Dilute in PBS (pH7.3) before use. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.

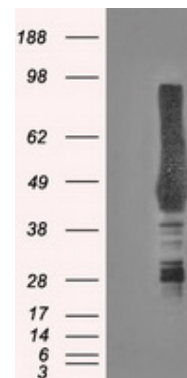
**Buffer:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Purification:**

Purified from mouse ascites fluids by affinity chromatography

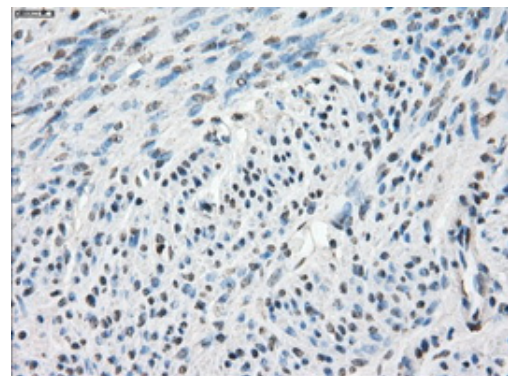
**Background:**

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.



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.

**IHC data**



Immunohistochemical staining of paraffin-embedded endometrium tissue using anti-CA9 mouse monoclonal antibody. (TA500623, Dilution 1:50)

**Related Product:**

- TrueORF cDNA clones
- VERIFY Tagged Antigen lysates
- HuSH-29 shRNA
- Western Blot reagents
- Anti-myc/DDK tag antibodies

\* Peptide sequence of the DDK-tag (Flag®): N-DYKDDDDK-C Flag® is a registered trademark of Sigma-Aldrich

**This product is to be used for laboratory only. Not for diagnostic or therapeutic use.**

