

**Rabbit Anti-Carbonic Anhydrase IX/CA IX [EPR23055-5]: RM0016, RM0016RTU7**

**Intended Use:** For Research Use Only

**Description:** Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. Carbonic Anhydrase 9 (CA9) has a distinctive expression pattern in normal and cancer tissues. The most abundant expression of CA9 was found in normal mucosa of the stomach and gallbladder. Other normal tissues have lower or no expression. Relatively high levels of CA9 are expressed in carcinomas of the cervix, kidney, lung, breast and many other tumors. Most studies have shown that decreased CA9 levels are independently associated with poor survival. Low levels of CA9 maybe benefit more from adjuvant treatment than patients with high levels.

**Specifications:**

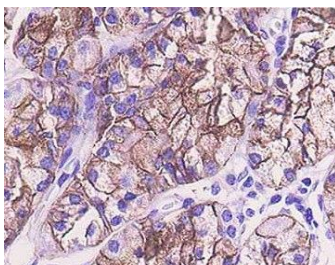
Clone: EPR23055-5  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse, rat  
 Immunogen: Synthetic peptide within mouse Carbonic Anhydrase IX aa 400 to the C-terminus  
 Localization: Membrane, some cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, IP, WB  
 Package:

Description	Catalog No.	Size
Carbonic Anhydrase IX/CA IX Concentrated	RM0016	1 ml
Carbonic Anhydrase IX/CA IX Prediluted	RM0016RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Kidney clear cell RCC  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human stomach stained with anti-CA IX using DAB

**References:**

1. Carbonic anhydrase IX (CAIX) does not differentiate between benign and malignant mesothelium. Ananthanarayanan V, et al. Am J Clin Pathol. Jul;142(1):82-7, 2014.
2. Expression of carbonic anhydrase IX in the breast carcinomas. Kajo K, et al. Ceska Gynekol. Jun;78(3):263-8. 2013.
3. Carbonic anhydrase IX as a specific biomarker for clear cell renal cell carcinoma: comparative study of Western blot and immunohistochemistry and implications for diagnosis. Giménez-Bachs JM, et al. Scand J Urol Nephrol. Oct;46(5):358-64, 2012.
4. Carbonic anhydrase IX in bladder cancer: a diagnostic, prognostic, and therapeutic molecular marker. Klatte T, et al. Cancer. Apr 1;115(7):1448-58, 2009.

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