
Product Name: CA IX Rabbit Polyclonal Antibody**Catalog #: APRab07768**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	58kDa

Antigen Information

Gene Name	CA9 CA9; G250; MN; Carbonic anhydrase 9; Carbonate dehydratase IX; Carbonic anhydrase IX;
Alternative Names	CA-IX; CAIX; Membrane antigen MN; P54/58N; Renal cell carcinoma-associated antigen G250; RCC-associated antigen G250; pMW1
Gene ID	768.0
SwissProt ID	Q16790
Immunogen	The antiserum was produced against synthesized peptide derived from human CA IX. AA range:33-82

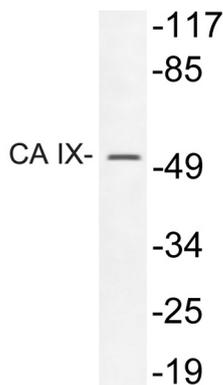
Background

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 is one of only two tumor-associated carbonic anhydrase isoenzymes 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. [provided by RefSeq, Jun 2014], catalytic activity: $\text{H}_2\text{CO}_3 = \text{CO}_2 + \text{H}_2\text{O}$, cofactor: Zinc, function: 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, induction: By hypoxia, PTM: Asn-346 bears high-mannose type glycan structures, similarity: Belongs to the alpha-carbonic anhydrase family, subcellular location: Found on the surface microvilli and in the nucleus, particularly in nucleolus, subunit: Forms oligomers linked by disulfide bonds, 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,

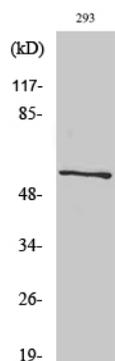
Research Area

Nitrogen metabolism;

Image Data



Western blot analysis of lysate from 293 cells treated with insulin, using CA IX antibody.



Western Blot analysis of various cells using CA IX Polyclonal Antibody.

