

Product Name: CA XII Rabbit Polyclonal Antibody
Catalog #: APRab07774



Summary

Production Name	CA XII Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CA12
Alternative Names	CA12; Carbonic anhydrase 12; Carbonate dehydratase XII; Carbonic anhydrase XII; CA-XII; Tumor antigen HOM-RCC-3.1.3
Gene ID	771.0
SwissProt ID	O43570.The antiserum was produced against synthesized peptide derived from human CA12. AA range:231-280

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:40000..
Molecular Weight	45kD

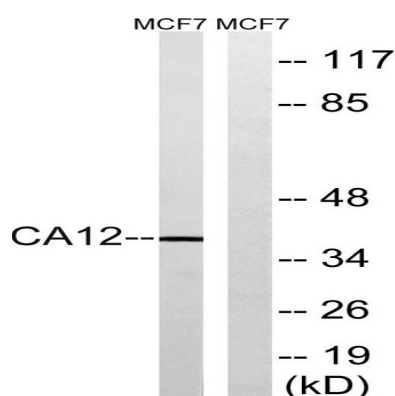
Background

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. This gene product is a type I membrane protein that is highly expressed in normal tissues, such as kidney, colon and pancreas, and has been found to be overexpressed in 10% of clear cell renal carcinomas. Three transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jun 2014], catalytic activity: $\text{H}_2\text{CO}_3 = \text{CO}_2 + \text{H}_2\text{O}$, cofactor: Zinc, enzyme regulation: Inhibited by acetazolamide, function: Reversible hydration of carbon dioxide, similarity: Belongs to the alpha-carbonic anhydrase family, tissue specificity: Highly expressed in colon, kidney, prostate, intestine and activated lymphocytes. Expressed at much higher levels in the renal cell cancers than in surrounding normal kidney tissue. Moderately expressed in pancreas, ovary and testis,

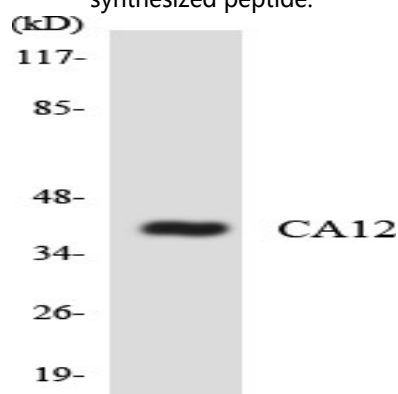
Research Area

Nitrogen metabolism;

Image Data

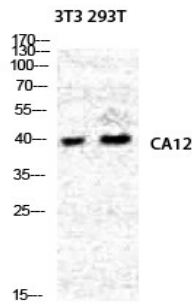


Western blot analysis of lysates from MCF-7 cells, using CA12 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from COLO205 cells using CA12 antibody.

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Western Blot analysis of NIH-3T3 293T cells using CA XII Polyclonal Antibody diluted at 1: 2000

Note

For research use only.