

## CA XII rabbit pAb

**Cat#: orb770423 (Manual)**

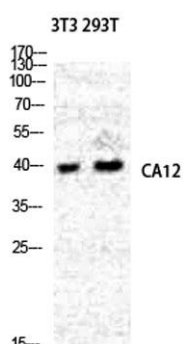
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	CA XII rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	IHC-p: 100-300.Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human CA12. AA range:231-280
<b>Specificity</b>	CA XII Polyclonal Antibody detects endogenous levels of CA XII protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Carbonic anhydrase 12
<b>Gene Name</b>	CA12
<b>Cellular localization</b>	Membrane; Single-pass type I membrane protein. Cell membrane .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

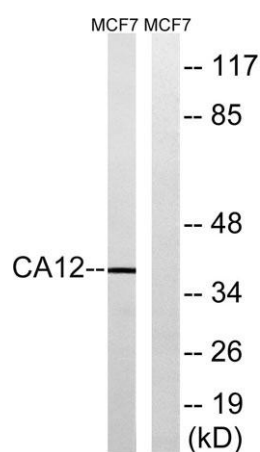
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	45kD
<b>Human Gene ID</b>	771
<b>Human Swiss-Prot Number</b>	O43570
<b>Alternative Names</b>	CA12; Carbonic anhydrase 12; Carbonate dehydratase XII; Carbonic anhydrase XII; CA-XII; Tumor antigen HOM-RCC-3.1.3

### Background

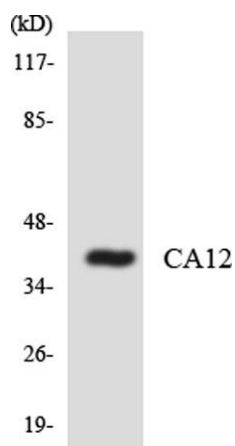
Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal 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],



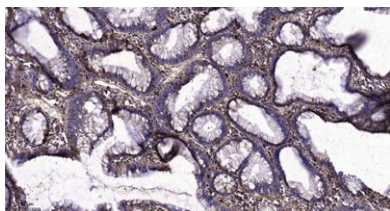
**Western Blot analysis of NIH-3T3 293T cells using CA XII Polyclonal Antibody diluted at 1:2000**



**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.



Immunohistochemical analysis of paraffin-embedded human colon cancer. 1, Tris-EDTA, pH 9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200 (4° overnight). 3, Secondary antibody was diluted at 1:200 (room temperature, 45 min).