

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **Product datasheet for TA505571**

## **CA12 Mouse Monoclonal Antibody [Clone ID: OTI2C6]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI2C6
Applications: IHC, WB

**Recommend Dilution:** WB 1:500, IHC 1:150

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CA12(NP\_001209) produced in HEK293T

cell

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

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 36.8 kDa

**Gene Name:** carbonic anhydrase 12

Database Link: NP 001209 Entrez Gene 771 Human

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. Two transcript variants encoding different isoforms have been identified for this gene.

[provided by RefSeq, Jul 2008]

**Synonyms:** CAXII; HsT18816

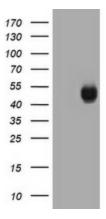
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Nitrogen metabolism

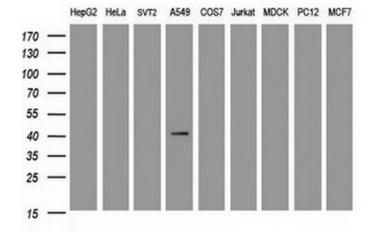




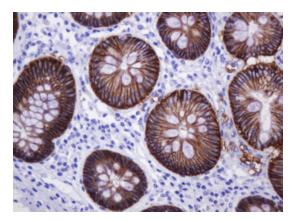
## **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CA12 ([RC204810], 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-CA12. Positive lysates [LY400487] (100ug) and [LC400487] (20ug) can be purchased separately from OriGene.

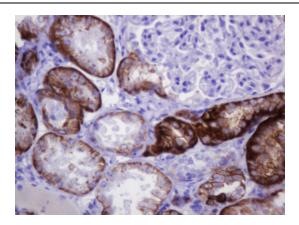


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CA12 monoclonal antibody at 1:500 dilution. (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

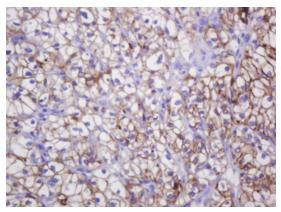


Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-CA12 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505571)

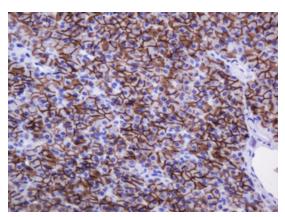




Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-CA12 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505571)

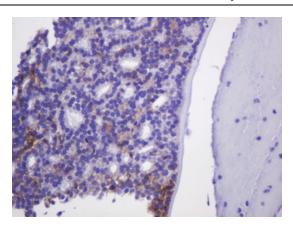


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-CA12 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505571)



Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-CA12 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505571)





Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-CA12 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA505571)