

## Product datasheet for **TA505571M**

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

#### Product data:

|                         |   |
|-------------------------|---|
| Product Type:           | Primary Antibodies  |
| Clone Name:             | OTI2C6  |
| Applications:           | IHC, WB   |
| Recommended 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) |
| Conjugation:            | Unconjugated  |
| Storage:                | Store at -20°C as received.   |
| Stability:              | Stable for 12 months from date of receipt.  |
| Predicted Protein Size: | 36.8 kDa  |
| Gene Name:              | carbonic anhydrase 12   |
| Database Link:          | <a href="#">NP_001209</a><br><a href="#">Entrez Gene 771 Human</a><br><a href="#">O43570</a>              |

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**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:**

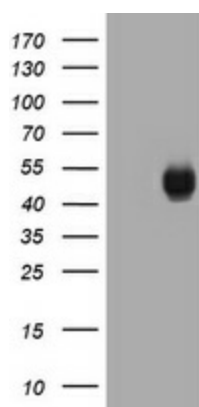
CAXII; HsT18816

**Protein Families:**

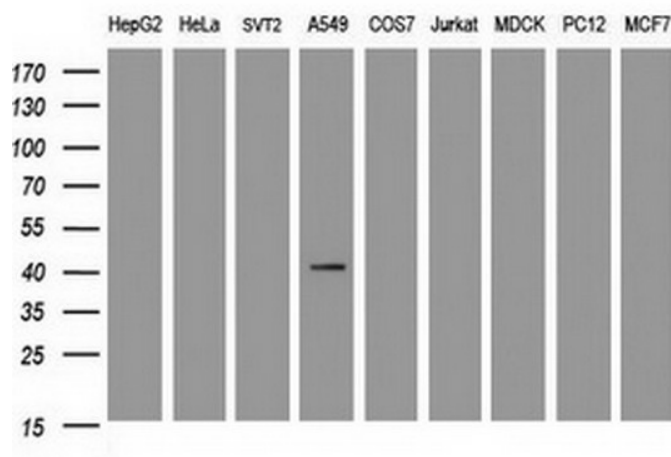
Druggable Genome, Transmembrane

**Protein Pathways:**

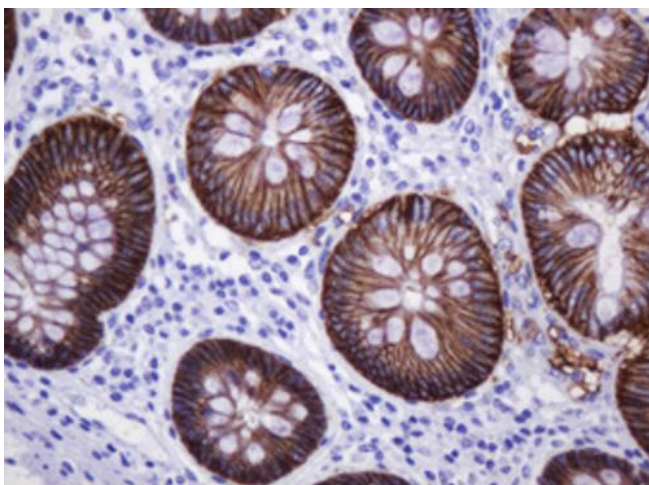
Nitrogen metabolism

**Product images:**


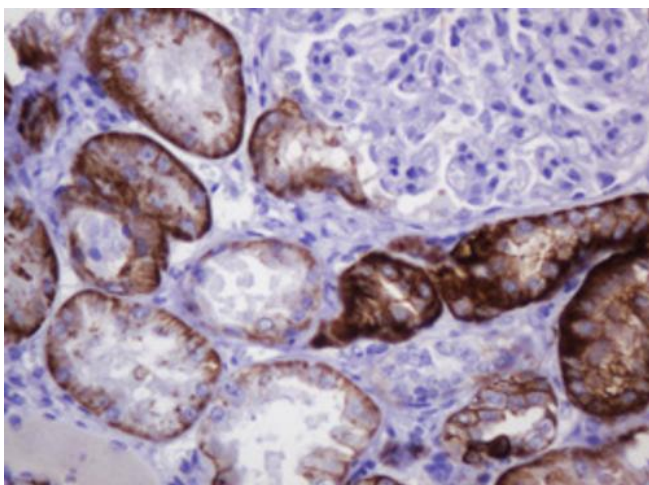
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CA12 (Cat# [RC204810], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CA12 (Cat# [TA505571]). Positive lysates [LY400487] (100ug) and [LC400487] (20ug) can be purchased separately from OriGene.



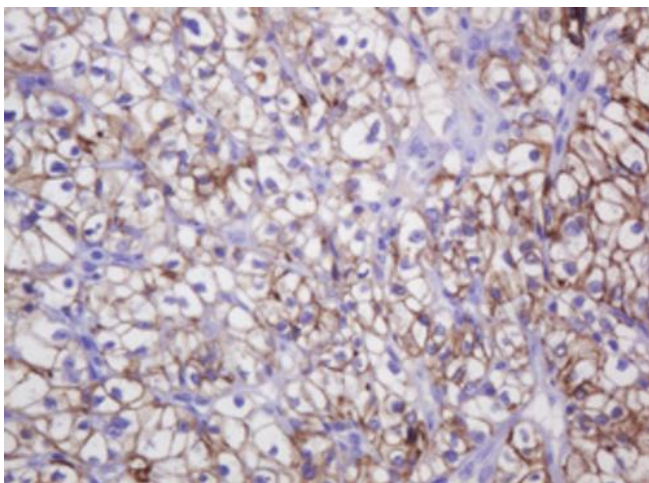
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CA12 monoclonal antibody at 1:500 dilution. (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



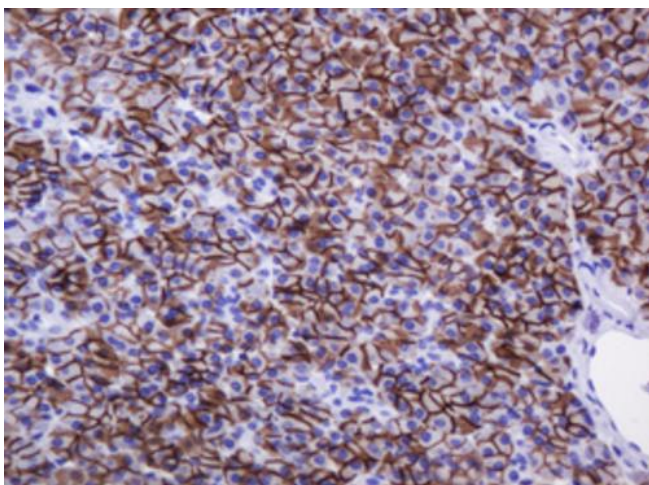
Immunohistochemical staining of paraffin-embedded Human colon tissue within the normal limits using anti-CA12 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



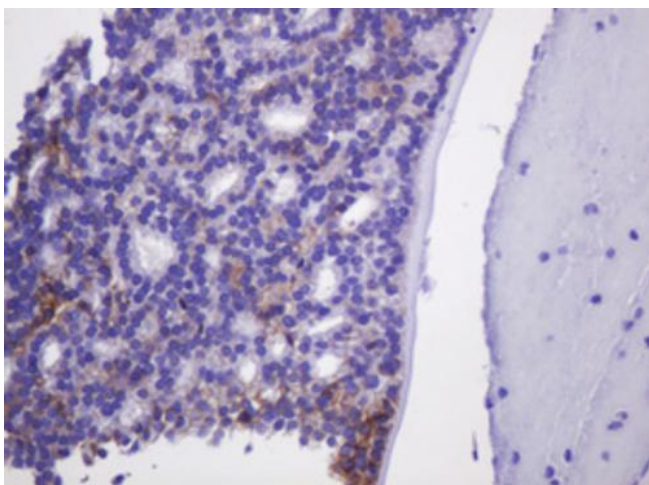
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-CA12 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human kidney tissue using anti-CA12 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-CA12 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-CA12 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.