

Product datasheet for **CF505570**

CA12 Mouse Monoclonal Antibody [Clone ID: OTI2E9]

Product data:

| | |
|-------------------------|--|
| Product Type: | Primary Antibodies |
| Clone Name: | OTI2E9 |
| Applications: | IF, WB |
| Recommended Dilution: | WB 1:2000, IF 1:100 |
| Reactivity: | Human |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Full length human recombinant protein of human CA12(NP_001209) produced in HEK293T cell. |
| Formulation: | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose) |
| Reconstitution Method: | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| 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: | Homo sapiens carbonic anhydrase 12 (CA12), transcript variant 1, mRNA. |
| Database Link: | NP_001209 Entrez Gene 771 Human O43570 |



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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]

Synonyms:

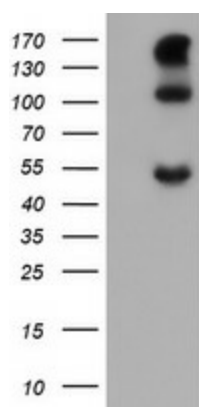
CAXII; HsT18816

Protein Families:

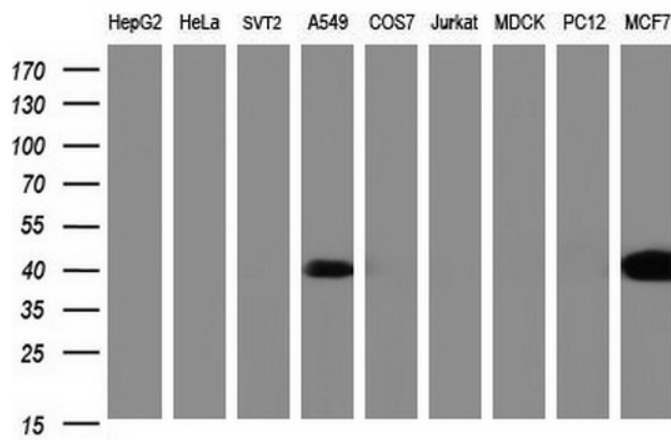
Druggable Genome, Transmembrane

Protein Pathways:

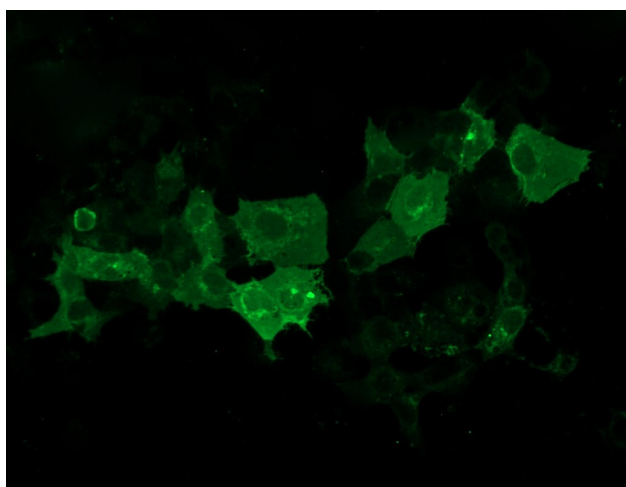
Nitrogen metabolism

Product images:


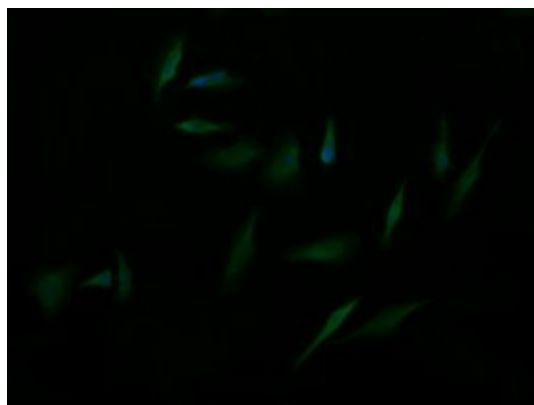
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CA12 ([RC204810], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CA12. Positive lysates [LY400487] (100ug) and [LC400487]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



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CA12 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).



Anti-CA12 mouse monoclonal antibody ([TA505570]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY CA12 ([RC204810]).



Immunofluorescent staining of HeLa cells using anti-CA12 mouse monoclonal antibody ([TA505570]).