

## 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:	carbonic anhydrase 12
Database Link:	<a href="#">NP_001209</a> <a href="#">Entrez Gene 771 Human</a> <a href="#">O43570</a>

**OriGene Technologies, Inc.**  
9620 Medical Center Drive, Ste 200  
Rockville, MD 20850, US  
Phone: +1-888-267-4436  
<https://www.origene.com>  
[techsupport@origene.com](mailto:techsupport@origene.com)  
EU: [info-de@origene.com](mailto:info-de@origene.com)  
CN: [techsupport@origene.cn](mailto:techsupport@origene.cn)



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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:**

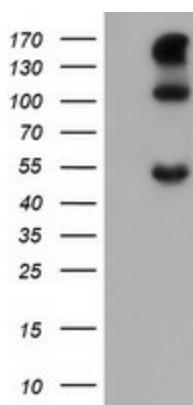
CAXII; HsT18816

**Protein Families:**

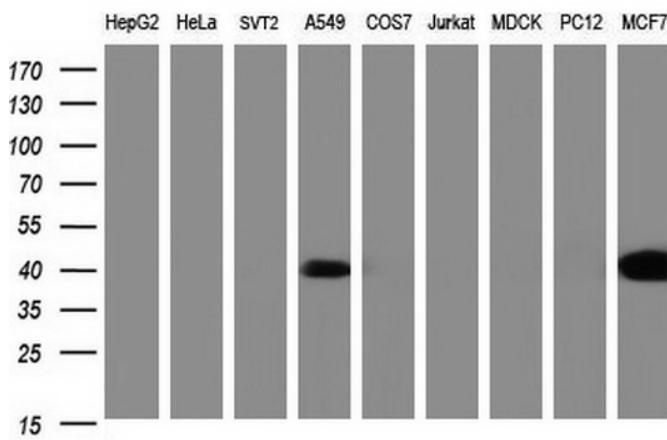
Druggable Genome, Transmembrane

**Protein Pathways:**

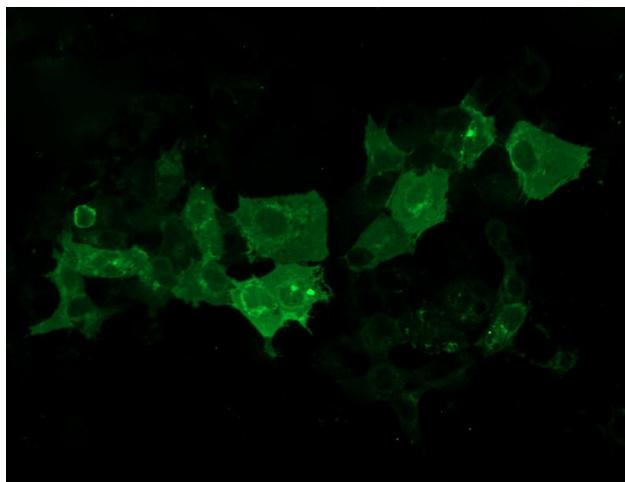
Nitrogen metabolism

**Product images:**

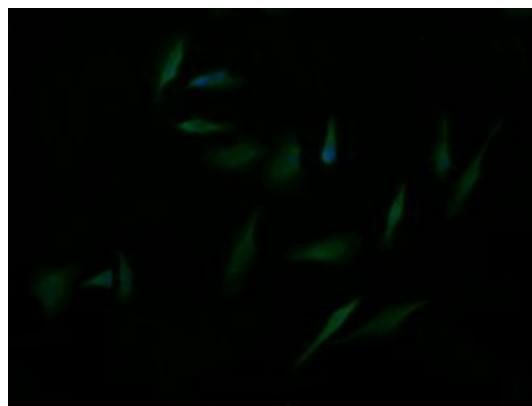
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CA12 ([RC204810], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CA12. Positive lysates [LY400487] (100ug) and [LC400487]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