

## Product datasheet for **TP309229M**

### Carbonic Anhydrase IV (CA4) (NM\_000717) Human Recombinant Protein

#### Product data:

|                                       |   |
|---------------------------------------|---|
| Product Type:                         | Recombinant Proteins  |
| Description:                          | Recombinant protein of human carbonic anhydrase IV (CA4), 100 µg  |
| Species:                              | Human   |
| Expression Host:                      | HEK293T   |
| Expression cDNA Clone or AA Sequence: | >RC209229 representing NM_000717<br><b>Red</b> =Cloning site <b>Green</b> =Tags(s)  |
|                                       | MRMLLALLALSAARPSASAESHWCYEVQAESSNYPCLVPVKWGGNCQKDRQSPINIVTTKAKVDKKLGRF<br>FFSGYDKKQTTWTQVQNNGHSMMLLENKASISGGGLPAPYQAKQLHLHWSLDLPYKGSEHSLDGEHFAM<br>EMH<br>IVHEKEKGTSRNVKEAQDPEDIAVLAFLEAGTQVNEGFQPLVEALSNIPKPEMSTTMAESSLLDLLPK<br>EEKLRHYFRYLGSLLTPTCDEKVVWTVFREPIQLHREQILAFSQKLYYDKEQTVSMKDNVRPLQLGQRT<br>VIKSGAPGRPLPWALPALLGPMLACLLAGFLR |
|                                       | <b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>  |
| Tag:                                  | C-Myc/DDK   |
| Predicted MW:                         | 33.1 kDa  |
| Concentration:                        | >0.05 µg/µL as determined by microplate BCA method  |
| Purity:                               | > 80% as determined by SDS-PAGE and Coomassie blue staining   |
| Buffer:                               | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol  |
| Preparation:                          | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.  |
| Note:                                 | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.  |
| Storage:                              | Store at -80°C.   |
| Stability:                            | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.   |
| RefSeq:                               | <u><a href="#">NP_000708</a></u>  |
| Locus ID:                             | 762   |



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UniProt ID: [P22748](#)

RefSeq Size: 1104

Cytogenetics: 17q23.1

RefSeq ORF: 936

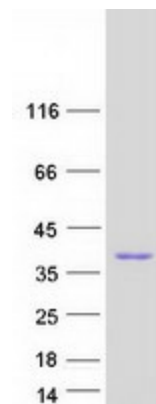
Synonyms: CAIV; Car4; RP17

**Summary:** 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. They show extensive diversity in tissue distribution and in their subcellular localization. This gene encodes a glycosylphosphatidyl-inositol-anchored membrane isozyme expressed on the luminal surfaces of pulmonary (and certain other) capillaries and proximal renal tubules. Its exact function is not known; however, it may have a role in inherited renal abnormalities of bicarbonate transport. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Nitrogen metabolism

### Product images:



Coomassie blue staining of purified CA4 protein (Cat# [TP309229]). The protein was produced from HEK293T cells transfected with CA4 cDNA clone (Cat# [RC209229]) using MegaTran 2.0 (Cat# [TT210002]).