

Product datasheet for RG209229

OriGene Technologies, Inc.

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Carbonic Anhydrase IV (CA4) (NM_000717) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Carbonic Anhydrase IV (CA4) (NM_000717) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: Carbonic Anhydrase IV

Synonyms: CAIV; Car4; RP17

Mammalian Cell

Selection:

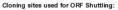
Neomycin

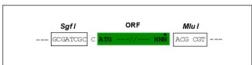
Vector: pCMV6-AC-GFP (PS100010)

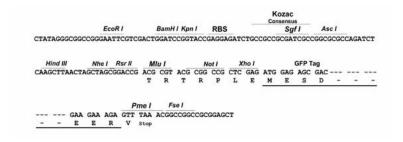
E. coli Selection: Ampicillin (100 ug/mL)

Restriction Sites: Sgfl-Mlul

Cloning Scheme:







ACCN: NM_000717

ORF Size: 936 bp



Carbonic Anhydrase IV (CA4) (NM_000717) Human Tagged ORF Clone - RG209229

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 000717.2</u>, <u>NP 000708.1</u>

RefSeq Size: 1104 bp RefSeq ORF: 939 bp Locus ID: 762

UniProt ID: P22748
Cytogenetics: 17q23.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Nitrogen metabolism

Gene 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

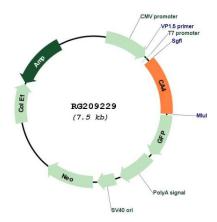
tissue distribution and in their subcellular localization. This gene encodes a

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]



Product images:



Circular map for RG209229