

Product datasheet for RC204839L1

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 EU: info-de@origene.com CN: techsupport@origene.cn

Carbonic Anhydrase IX (CA9) (NM_001216) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Carbonic Anhydrase IX (CA9) (NM_001216) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Carbonic Anhydrase IX

Synonyms: CAIX; MN

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204839).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001216

ORF Size: 1377 bp



Carbonic Anhydrase IX (CA9) (NM_001216) Human Tagged Lenti ORF Clone - RC204839L1

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 001216.1</u>, <u>NP 001207.1</u>

RefSeq Size: 1561 bp RefSeq ORF: 1380 bp Locus ID: 768

UniProt ID: Q16790

Cytogenetics: 9p13.3

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Nitrogen metabolism

MW: 49.7 kDa

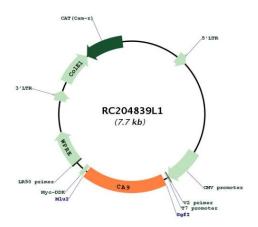
Gene Summary: Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the

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. CA IX is a transmembrane protein and is one of only two tumor-associated carbonic anhydrase isoenzymes known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it

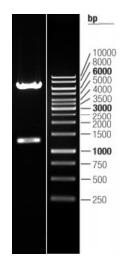
to 9p13-p12. [provided by RefSeq, Jun 2014]



Product images:



Circular map for RC204839L1



Double digestion of RC204839L1 using Sgfl and Mlul