

## **Product datasheet for RC215024L4**

# CA7 (NM\_005182) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: CA7 (NM\_005182) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: CA7

Synonyms: CA-VII; CAVII

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

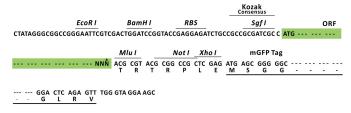
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC215024).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.



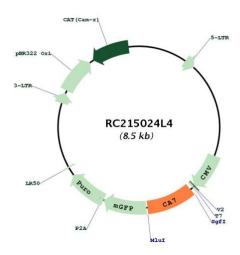
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#### Plasmid Map:



**ACCN:** NM\_005182

ORF Size: 792 bp

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 005182.2</u>

RefSeq Size: 1563 bp RefSeq ORF: 795 bp



### CA7 (NM\_005182) Human Tagged Lenti ORF Clone - RC215024L4

Locus ID: 766

 UniProt ID:
 P43166

 Cytogenetics:
 16q22.1

Protein Families: Druggable Genome
Protein Pathways: Nitrogen metabolism

MW: 29.5 kDa

**Gene Summary:** Carbonic anhydrases 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. The cytosolic protein encoded by this gene is predominantly expressed in the brain and contributes to bicarbonate driven GABAergic neuron excitation. Alternative splicing in the coding region results in multiple transcript

variants encoding different isoforms. [provided by RefSeq, Aug 2018]