

Product datasheet for RC204810L4

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OriGene Technologies, Inc.

CA12 (NM_001218) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CA12 (NM_001218) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: CA12

Synonyms: CA-XII; CAXII; HsT18816; T18816

Mammalian Cell Puromycin

Selection:

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

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

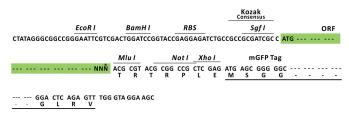
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204810).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_001218

ORF Size: 1062 bp



CA12 (NM_001218) Human Tagged Lenti ORF Clone - RC204810L4

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 001218.3</u>

RefSeq Size:4209 bpRefSeq ORF:1065 bp

UniProt ID: <u>043570</u>

Locus ID:

Cytogenetics: 15q22.2

Domains: carb anhydrase

Protein Families: Druggable Genome, Transmembrane

771

Protein Pathways: Nitrogen metabolism

MW: 39.5 kDa

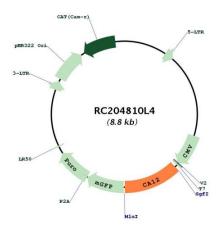
Gene Summary: Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the

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. 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. Three transcript variants encoding different isoforms have been identified for this gene.

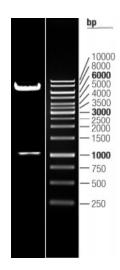
[provided by RefSeq, Jun 2014]



Product images:



Circular map for RC204810L4



Double digestion of RC204810L4 using Sgfl and Mlul