

## **Product datasheet for RC207002L1**

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OriGene Technologies, Inc.

### CA5B (NM\_007220) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** CA5B (NM\_007220) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: CA5B

Synonyms: CA-VB; CAVB

Mammalian Cell None

Selection:

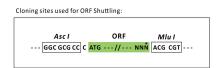
Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

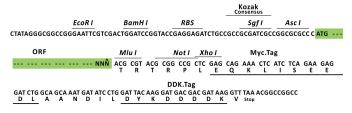
**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC207002).

Sequence:

**Restriction Sites:** Ascl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_007220

ORF Size: 951 bp

#### CA5B (NM\_007220) Human Tagged Lenti ORF Clone - RC207002L1

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>NM 007220.3</u>

 RefSeq Size:
 6032 bp

 RefSeq ORF:
 954 bp

 Locus ID:
 11238

 UniProt ID:
 Q9Y2D0

 Cytogenetics:
 Xp22.2

Domains: carb\_anhydrase

Protein Families: Druggable Genome

Protein Pathways: Nitrogen metabolism

MW: 36.43 kDa

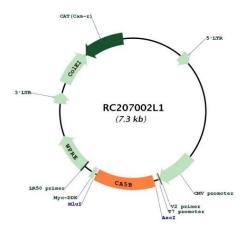
**Gene Summary:** Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the

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. This gene encodes carbonic anhydrase 5B. CA5B, and the related CA5A gene, has its expression localized in the mitochondria though CA5B has a wider tissue distribution than CA5A, which is restricted to the liver, kidneys, and skeletal muscle. A carbonic anhydrase pseudogene (CA5BP1) is adjacent to the CA5B gene and these two loci produce CA5BP1-CA5B readthrough transcripts. [provided by RefSeq, Jan

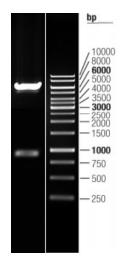
2019]



# **Product images:**



Circular map for RC207002L1



Double digestion of RC207002L1 using Ascl and