

## Product datasheet for **RG210217**

### Calcitonin (CALCA) (NM\_001033952) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Calcitonin (CALCA) (NM\_001033952) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** CALCA  
**Synonyms:** CALC1; CGRP; CGRP-alpha; CGRP-I; CGRP1; CT; KC; PCT  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG210217 representing NM\_001033952  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCTTCCAAAAGTTCTCCCCTTCTGGCTCTCAGCATCTTGGTCTGTTGCAGGCAGGCAGCCTCC  
 ATGCAGCACCATTAGGTCTGCCCTGGAGAGCAGCCAGCAGACCCGCCACGCTCAGTGAGGACGAAGC  
 GCGCTCTGCTGGCTGCACTGGTGCAGGACTATGTGCAGATGAAGGCCAGTGAGCTGGAGCAGGAGCAA  
 GAGAGAGAGGGCTCCAGCCTGGACAGCCCCAGATCTAAGCGGTGCGGTAATCTGAGTACTTGCATGCTGG  
 GCACATACAGCAGGACTTCAACAAGTTTACACGTTCCCCAACTGCAATTGGGGTTGGAGCACCTGG  
 AAAGAAAAGGGATATGTCCAGCGACTTGGAGAGAGACCATCGCCCTCATGTTAGCATGCCCCAGAATGCC  
 AAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG210217 representing NM\_001033952  
 Red=Cloning site Green=Tags(s)  
 MGFQKFSPLAL SILVLLQAGSLHAAPFRSALESSPADPATLSEDEARLLLAALVQDYVQMKASELEQEQ  
 EREGSSLDSPRSKRCGNLSTCMLGTYTQDFNKFHTFPQTAIGVGAPGKKRDMSSDLERDHRPHVSMQPNA  
 N

**TRTRPLE** - GFP Tag - V

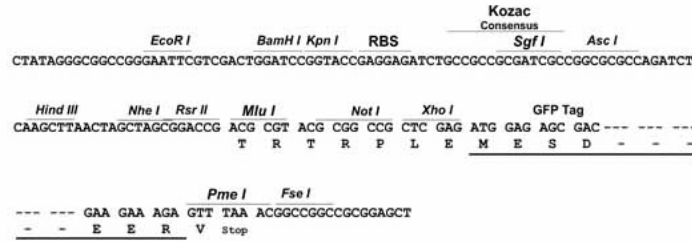
**Restriction Sites:** SgfI-MluI



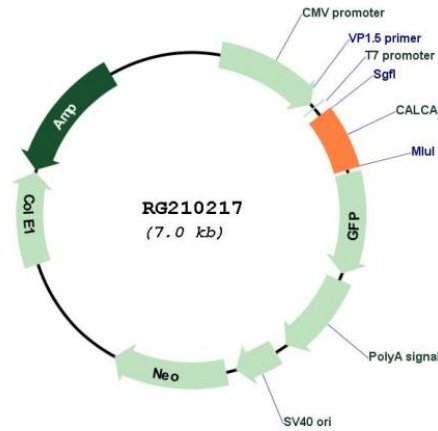
[View online »](#)

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_001033952  
 ORF Size: 423 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:** [NM\\_001033952.3](#)

**RefSeq Size:** 816 bp

**RefSeq ORF:** 426 bp

**Locus ID:** 796

**UniProt ID:** [P01258](#)

**Cytogenetics:** 11p15.2

**Protein Families:** Druggable Genome, Secreted Protein

**Gene Summary:** This gene encodes the peptide hormones calcitonin, calcitonin gene-related peptide and katacalcin by tissue-specific alternative RNA splicing of the gene transcripts and cleavage of inactive precursor proteins. Calcitonin is involved in calcium regulation and acts to regulate phosphorus metabolism. Calcitonin gene-related peptide functions as a vasodilator and as an antimicrobial peptide while katacalcin is a calcium-lowering peptide. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Aug 2014]