

## Product datasheet for RC210217

### 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:** Myc-DDK  
**Symbol:** Calcitonin  
**Synonyms:** CALC1; CGRP; CGRP-alpha; CGRP-I; CGRP1; CT; KC; PCT  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC210217 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCTTCCAAAAGTTCTCCCCTTCTGGCTCTCAGCATCTTGGTCTGTTGCAGGCAGGCAGCCTCC  
ATGCAGCACCATTCAAGTCTGCCCTGGAGAGCAGCCAGCAGACCCGCCACGCTCAGTGAGGACGAAGC  
GCGCTCTGCTGGCTGCACTGGTGCAGGACTATGTGCAGATGAAGGCCAGTGAGCTGGAGCAGGAGCAA  
GAGAGAGAGGGCTCCAGCCTGGACAGCCCAAGTCTAAGCGGTGCGGTAATCTGAGTACTGCATGCTGG  
GCACATACAGCAGGACTTCAACAAGTTTCACACGTTCCCCAACTGCAATTGGGGTTGGAGCACCTGG  
AAAGAAAAGGATATGTCCAGCGACTTGGAGAGAGACCATCGCCCTCATGTTAGCATGCCCCAGAATGCC  
AAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC210217 protein sequence  
Red=Cloning site Green=Tags(s)  
MGFQKFSFPLALSILVLLQAGSLHAAPFRSALESSPADPATLSEDEARLLLAALVQDYVQMKASELEQEQ  
EREGSSLDSPRSKRGNLSTCMLGTYTQDFNKFHFPQT AIGVGAPGKKRDMSSDLERDHRPHVSMQPNA  
N

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

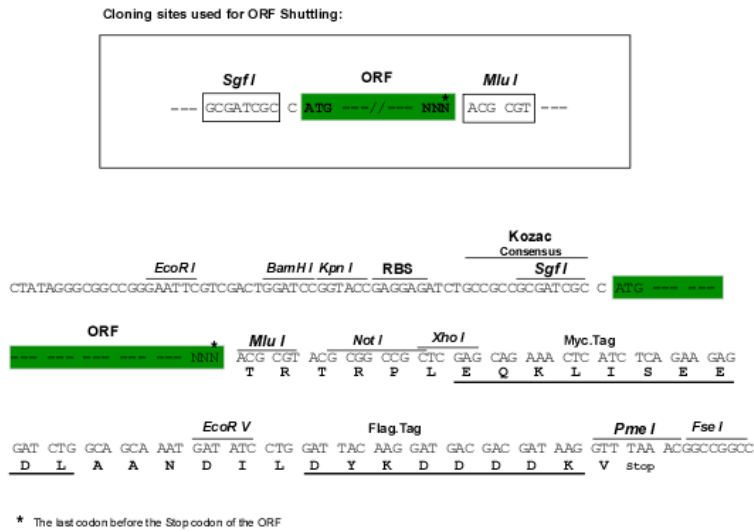
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6376\\_h10.zip](https://cdn.origene.com/chromatograms/mk6376_h10.zip)



[View online >](#)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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](#)

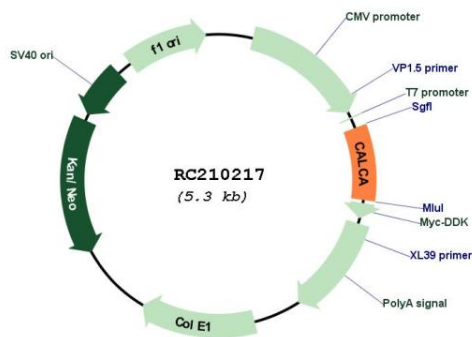
**Cytogenetics:** 11p15.2

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

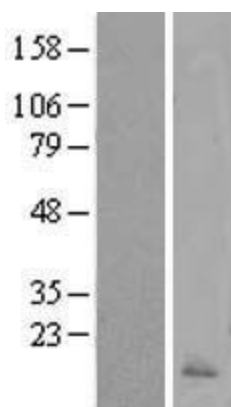
**MW:** 15.5 kDa

**Gene Summary:** This gene encodes the peptide hormones calcitonin, calcitonin gene-related peptide and katalcalcin 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 katalcalcin is a calcium-lowering peptide. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Aug 2014]

**Product images:**



Circular map for RC210217



Western blot validation of overexpression lysate (Cat# [LY419771]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC214594] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).