

Product datasheet for RC214594

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Calcitonin (CALCA) (NM_001741) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Calcitonin (CALCA) (NM_001741) Human Tagged ORF Clone

Tag:Myc-DDKSymbol:Calcitonin

Synonyms: CALC1; CGRP; CGRP-alpha; CGRP-l; CGRP1; CT; KC; PCT

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC214594 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

AAC

 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA**

Protein Sequence: >RC214594 protein sequence

Red=Cloning site Green=Tags(s)

MGFQKFSPFLALSILVLLQAGSLHAAPFRSALESSPADPATLSEDEARLLLAALVQDYVQMKASELEQEQ EREGSSLDSPRSKRCGNLSTCMLGTYTQDFNKFHTFPQTAIGVGAPGKKRDMSSDLERDHRPHVSMPQNA

Ν

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

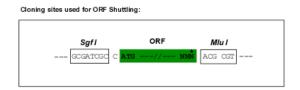
Chromatograms: https://cdn.origene.com/chromatograms/mk6376 h10.zip

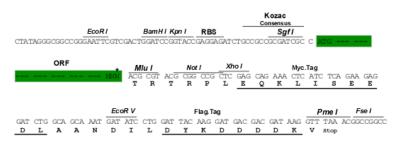




Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_001741

ORF Size: 423 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 001741.3</u>

RefSeq Size: 792 bp
RefSeq ORF: 426 bp
Locus ID: 796



 UniProt ID:
 P01258

 Cytogenetics:
 11p15.2

Protein Families: Druggable Genome, Secreted Protein

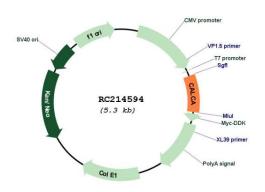
MW: 15.5 kDa

Gene Summary: This gene encodes the peptide hormones calcitonin, calcitonin gene-related peptide and

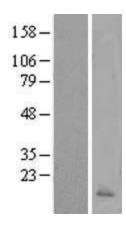
katacalcin by tissue-specific alternative RNA splicing of the gene transcripts and cleavage of inactive precursor proteins. Calcitonin is involved in calcium regulation and acts to regulate phosphorus metabolism. Calcitonin gene-related peptide functions as a vasodilator and as an antimicrobial peptide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

2014]

Product images:

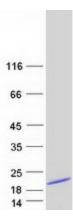


Circular map for RC214594



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]).





Coomassie blue staining of purified CALCA protein (Cat# [TP314594]). The protein was produced from HEK293T cells transfected with CALCA cDNA clone (Cat# RC214594) using MegaTran 2.0 (Cat# [TT210002]).