OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG200706

Calca (NM_001033954) Mouse Tagged ORF Clone

Product data:

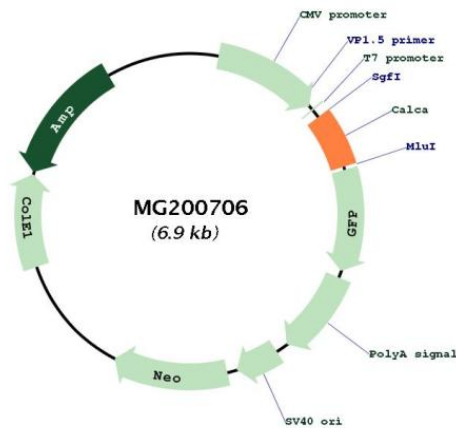|	
Product Type:	Expression Plasmids
Product Name:	Calca (NM_001033954) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Calca
Synonyms:	C; CA; Calc; Calc1; Cg; Cgrp; CGRP-1; CGRP1; Ct; Ctn
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG200706 representing NM_001033954. Blue=ORF Red=Cloning site Green=Tag(s) GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGGGCTTCCTGAAGTTCTCCCCTTTCCTGGTTGTCAGCATCTTGCTCCTGTACCAGGCATGCAGCCTC CAGGCAGTGCCTTTGAGGTCAATCTTGGAAAGCAGCCCAGGCATGGCCACTCTCAGTGAAGAAGAAGTT CGCCTGCTGGCTGCACTGGTGCAGGACTATATGCAGATGAAAGCCAGGGAGCTGGAGCAGGAGGAAGAG CAGGAGGCTGAGGGCTCTAGTGTCACTGCTCAGAAGAGATCCTGCAACACTGCCACCTGTGTGACCCAT CGGCTGGCAGGTCTGCTGAGCAGATCAGGAGGTGTGGTGAAGGACAACTTTGTTCCCACCAATGTGGGC TCTGAAGCCTTCGGCCGCCGCCGCAGGGACCTTCAGGCC ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
Protein Sequence:	>Peptide sequence encoded by MG200706 Blue=ORF Red=Cloning site Green=Tag(s) MGFLKFSPFLVVSILLLYQACSLQAVPLRSILESSPGMATLSEEEVRLLAALVQDYMQMKARELEQEEE QEAEGSSVTAQKRSCNTATCVTHRLAGLLSRSGGVVKDNFVPTNVGSEAFGRRRRDLQA TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
Restriction Sites:	SgfI-MluI

View online »

Cloning Scheme:

Cloning sites used for ORF Shuttling:

```
            Sgf I              ORF              Mlu I
--- GCGATCGC C ATG ---//--- NNN ACG CGT ---
```

```
                                              Kozac
                                            Consensus
          EcoR I          BamH I  Kpn I  RBS           Sgf I      Asc I
CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGCGCCAGATCT

   Hind III      Nhe I  Rsr II  Mlu I        Not I    Xho I          GFP Tag
CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---
                          T   R   T   R   P   L   E   M   E   S   D   -   -   -

                       Pme I     Fse I
--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT
 -   -   E   E   R   V  Stop
```

Plasmid Map:

ACCN:	NM_001033954
ORF Size:	384 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:	NM_001033954.3
RefSeq Size:	939 bp
RefSeq ORF:	387 bp
Locus ID:	12310
UniProt ID:	Q99JA0
Cytogenetics:	7 59.99 cM
MW:	14.1 kDa
Gene Summary:	This gene encodes the peptide hormones calcitonin, calcitonin gene-related peptide (CGRP) and katacalcin. Alternative splicing of the mRNA results in multiple variants that encode either calcitonin or CGRP preproproteins. Post-translational processing of the calcitonin and CGRP propeptides results in either calcitonin and katacalcin, or CGRP, respectively. Calcitonin and katacalcin modulate calcium levels in the blood stream. CGRP can function as a vasodilator and play a role in the transmission of pain. The human homolog of CGRP was found to have antimicrobial activity. [provided by RefSeq, Mar 2015]