

## Product datasheet for **MC203458**

### Calm1 (NM\_009790) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calm1 (NM_009790) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Calm1
Synonyms:	AI256814; AI327027; AI461935; AL024000; Calm; CaM; Cam1
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

**Fully Sequenced ORF:** >BC054805  
GGGAGTCTCGTGTCCGTGGTGCCGTTACTCGAAGTCGGGCGGCGGCTGAGGCTCAGCGCACAAACGCAGGT  
AGCGCGTTAGCAGCAGCAGAAGCGGAGGCACCTCGGCGGTACAGCCCTGCGCTGGTGCAGCCACCCTC  
GCCTGCTCCGTTCTTCTTCTCCTTCGCTCGCACCATGGCTGATCAGCTGACTGAAGAGCAGATTGCTGAAT  
TCAAGGAAGCTTTCTCCCTATTTCGATAAAGATGGTGACGGCACCATCACAAACCAAGGAAGTGGGACCGT  
CATGCGGTCACTGGGTCAGAACCAACAGAAGCCGAGCTGCAGGATATGATCAACGAAGTGGATGCTGAT  
GGCAATGGCACCATTGACTTCCCAGAGTCTTGACTATGATGGCTAGAAAAATGAAAGACACAGATAGCG  
AAGAAGAGATCCGCGAGGCTTCCGAGTGTGGACAAGGATGGGAATGGTTACATCAGTGCAGGACAGAACT  
GCGCCACGTCATGACAACTTAGGAGAAAAGCTAACAGATGAAGAAGTAGATGAAATGATCAGAGAAGCA  
GATATTGATGGCGACGGACAAGTCAACTATGAAGAATTCGTACAGATGATGACTGCAAAAATGAAGACCTA  
CTTTCACTACTTTTCCCTCTAGAAGAATCAAATTGAAATCTTTTACTTACCTTTACAAAAAAGA  
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CCATGGTGACAGTGACACCCCTGGTGGCGAGCCGAGTGTGATGGTTCATTGCTGTGCGCATTGCATTGGA  
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AAGCTGGATTTCCACCAGGTTCTTAGCCACAACCTCTGAAACCAGACAGACTCGGAGTCTTTGCCGT  
CTATGACCACGTAAGTCTTGTATTTTCTGTGTTGTGTGCACATGCGCAGATCACAGTCAGGTGATGTT  
AGACTAGACCCTGGTGAGAGAAGGCGTCTCCAGCGTACAGTTAGGATGTCTTGCTGTGCTGCTGCTGA



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CCTGTTGTAACATACATGAGGCCATCTGTGCGGGAGACATGATTTAGTGTGTCTGTATTCCTATACTCACT
GTGTATGGCAAAAGCAGGCCAGACAAAGACACTACCTTTGATTGAGTTTGTAAATTTATGGTTATACTTAT
CTTTAGCCGCTATACTTCTTTATTATTATTATTTAACTGCCTTTTCTCCCGTTGAGTACAGTTAGTGCA
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TTCTTCTGAATGAAGACTGTAAATTTGGTCAAGTCAACTCTTAGTTCAGTTATCTTAATCATTTGAATG
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CCACTCAGCTGGCGGTCACCTACTTAATTTTTTCAATACCCCTTGAAGTTGTCCGGTAGAAGTCAGATT
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GGGGACCAACTCTATGAAAATTGTAATAAGTTTTATTTATAAACCTGGCACTGTATTCATAAACATT
TCTGCAGCCTTAAAAAAAAAAAAAAAAAAAAA
    
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- Restriction Sites:** Ascl-NotI
- ACCN:** NM\_009790
- Insert Size:** 450 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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:** [BC054805](#), [AAH54805](#)

**RefSeq Size:** 4021 bp

**RefSeq ORF:** 450 bp

**Locus ID:** 12313

**UniProt ID:** [P0DP26](#)

**Cytogenetics:** 12 E

**Gene Summary:** This gene encodes a member of the EF-hand calcium-binding protein family. The encoded protein acts as a calcium sensor and is involved in relaying signals to calcium-sensitive proteins, enzymes and ion channels. The protein-calcium complex binds target proteins to regulate several cellular processes, including smooth muscle contraction, inflammation, apoptosis and the immune response. Mutations in the human gene are associated with catecholaminergic polymorphic ventricular tachycardia and long QT syndrome 14. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2015]

Transcript Variant: This variant (2) contains an alternate 5' terminal exon resulting in the use of an alternate start codon compared to variant 1. The encoded isoform (2) has a distinct N-terminus and is shorter than isoform 1.