

Product datasheet for **MG201052**

Calm3 (NM_007590) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Calm3 (NM_007590) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Calm3
Synonyms: Cam3; CaMA; Camc; R75142
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201052 representing NM_007590
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGACCAGCTGACTGAGGAACAGATTGCAGAGTTCAAGGAAGCCTTCTCCCTCTTCGACAAGGATG
GAGATGGCACCATTACCACCAAGGAGCTGGGGACTGTGATGAGATCGCTGGGACAGAACCCCACTGAGGC
GGAGCTGCAGGACATGATTAATGAGGTGGATGCTGATGGCAATGGGACCATTGACTTCCCAGAGTTCTTG
ACCATGATGGCCAGAAAGATGAAGGATACAGACAGCGAGGAGGAGATACGAGAGGCCTCCGTGTCTTTG
ACAAGGATGGGAATGGCTATATTAGCGTGCCGAGCTGCGTCACGTCATGACGAACCTGGGGGAGAAGCT
GACAGATGAGGAAGTGGATGAGATGATCCGAGAGGCCGACATTGATGGAGATGGCCAGGTCAATTATGAA
GAGTTTGTACAGATGACTGCGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201052 representing NM_007590
Red=Cloning site Green=Tags(s)

MADQLTEEQIAEFKEAFSLFDKGDGTITTKELGTVMRSLGQNPTEAELQDMINEVDADNGTIDFPEFL
TMMARKMKDTDSEEEIREAFRVFDKDGNGYISAAELRHVMTNLGEKLTDEEVDEMIREADIDGDGQVNYE
EFVQMMTAK

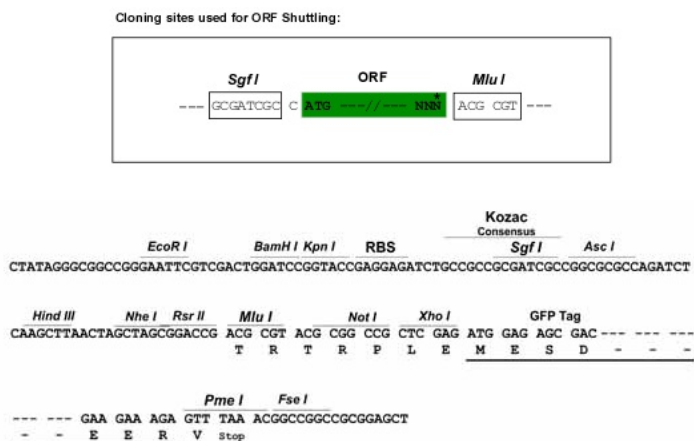
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

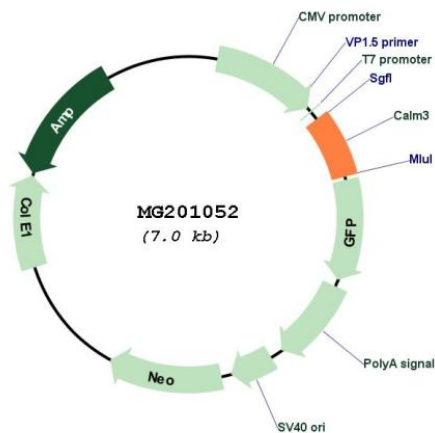


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Cloning Scheme:



Plasmid Map:



ACCN: NM_007590

ORF Size: 447 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:	<ol style="list-style-type: none">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_007590.3, NP_031616.1</u>
RefSeq Size:	2233 bp
RefSeq ORF:	450 bp
Locus ID:	12315
UniProt ID:	<u>P0DP26</u>
Cytogenetics:	7 9.15 cM
Gene Summary:	Calmodulin mediates the control of a large number of enzymes, ion channels, aquaporins and other proteins through calcium-binding. Among the enzymes to be stimulated by the calmodulin-calcium complex are a number of protein kinases and phosphatases. Together with CCP110 and centrin, is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis. Mediates calcium-dependent inactivation of CACNA1C. Positively regulates calcium-activated potassium channel activity of KCNN2.[UniProtKB/Swiss-Prot Function]