

Product datasheet for **MG201052**

Caln3 (NM_007590) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: TurboGFP
Symbol: Caln3
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)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCTGACCAGCTGACTGAGGAACAGATTGCAGAGTTCAAGGAAGCCTTCTCCCTCTTCGACAAGGATG
GAGATGGCACCATTACCACCAAGGAGCTGGGGACTGTGATGAGATCGCTGGGACAGAACCCCACTGAGGC
GGAGCTGCAGGACATGATTAATGAGGTGGATGCTGATGGCAATGGACATTGACTTCCCAGAGTTCTTG
ACCATGATGGCCAGAAAGATGAAGGATACAGACAGCGAGGAGGAGATACGAGAGGCCTTCCGTGTCTTTG
ACAAGGATGGGAATGGCTATATTAGCGCTGCCGAGCTGCGTCACGTCATGACGAACCTGGGGGAGAAGCT
GACAGATGAGGAAGTGGATGAGATGATCCGAGAGGCCGACATTGATGGAGATGGCCAGGTCAATTATGAA
GAGTTGTACAGATGATGACTGCGAAG

ACGCGTACGCGCCGCTCGAG - GFP Tag - GTTTAA

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

MADQLTEEQIAEFKEAFSLFDKDGDTITTKELGTVMRSLGQNPTAEELQDMINEVDADNGTIDFPEFL
TMMARKMKDSEEEIREAFRVFDKDGNGYISAAELRHVMTNLGEKLTDEEVDEMIREADIDGQGQVNYE
EFVQMMTAK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:


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:**
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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_007590.3](#), [NP_031616.1](#)

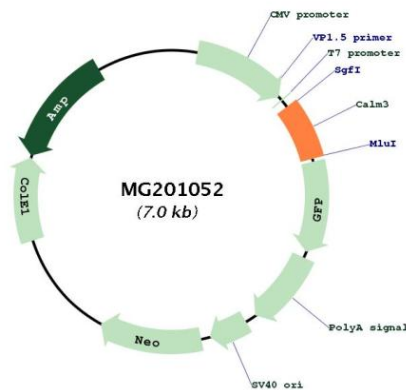
RefSeq Size: 2233 bp
RefSeq ORF: 450 bp
Locus ID: 12315

UniProt ID: [P0DP26](#)

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 CCPI10 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]

Product images:



Circular map for MG201052