

Product datasheet for **MC226591**

Mcub (NM_001293644) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Mcub (NM_001293644) Mouse Untagged Clone
Tag: Tag Free
Symbol: Mcub
Synonyms: 9030408N13Rik; Ccdc109b; MCUB
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC226591 representing NM_001293644
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCCAGGAGCTCTGTCCGGCAGGAGGATGCTCCCGAGCGGGCTATGTCTGGTCCGGTGGCAGCTGCTGC
GGACGATCCGAGCCCGCGCCGCGGGGATCCCAGGAGCTGCCATCCACACCCAGTTTTATGTATGAA
ACTCTATGAAAATCCAAAATACCACCAAGCACTCCATTATGGGACAGTGGAGCCACAGGATGAAATAACA
GTTACTTATAAACACGGCCTCCCTTGGTAACCCCTCACTCTGCCATCCAGAAAAGAGCGCTGCCAGTTTG
TAGTCAAGCCGATGTTGTGACAGTAGGCTCATTCTGCAGGACTTACAGAATGAGGATAAAGGCATCAA
AACTGCAGCCATCATCACGGCAGATGGCAGTCAAATCCAGCTTCAACATTGATGGACACTTTGCTAATG
ACAGATTTTAAGCTCATCATTAAACAACTACGGTATGATATACGGTGTCAAGAAGAGTCAAAGCTGCA
ATAGAAGCCCGGTGCGAAGCCAACACAGTGGTCTCCTGTGGCCGGCTTAGCTCTGCTCTCCGTGCAGG
GCGGGCGCTGGCCTGGCTTACTTGGTGGGTGACTCCTGGGATATCATGGAGCCAGTTACCTTCTTCTCT
GTCGTTTGCGAATCCATCGTCTTTTTTGCACTTTCATCATAACCCGGCAGAACTACACATACTCATCC
CTCCGGAGCAGGCAGTTTCTTCAGTTCTCCACAAGAAATCGCAGCGCGGTGTT**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001293644
Insert Size: 759 bp



[View online »](#)

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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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_001293644.1</u> , <u>NP_001280573.1</u>
RefSeq Size:	1171 bp
RefSeq ORF:	759 bp
Locus ID:	66815
UniProt ID:	<u>Q810S1</u>
Cytogenetics:	3 G3
Gene Summary:	<p>Negatively regulates the activity of MCU, the mitochondrial inner membrane calcium uniporter, and thereby modulates calcium uptake into the mitochondrion. Does not form functional calcium channels by itself. Mitochondrial calcium homeostasis plays key roles in cellular physiology and regulates cell bioenergetics, cytoplasmic calcium signals and activation of cell death pathways.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 3' UTR and lacks an alternate exon in the 3' coding region resulting in a frameshift compared to variant 1. The encoded isoform (2) has a distinct C-terminus and is shorter than isoform 1.</p>