

Product datasheet for **RG232429**

MCU (NM_001270680) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MCU (NM_001270680) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MCU
Synonyms: C10orf42; CCDC109A; HsMCU
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG232429 representing NM_001270680
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTACACCAGAGGATCGCTTCCTGGCAGAATTTGGGAGCTGTTTATTGCAGCACTGTTGTGCCCTCTG
ATGATGTTACAGTGGTTTATCAAATGGGTACCTGTGATATCTGTGAGGCTACCATCCCGCGTGAACG
CTGTCAGTTCACACTCAAGCCTATCTGACTCTGTTGGTGTATTTTACGACAAGGAGGAT
CGGGGAATTGACAGAGTTGCTATCTATTACCAGATGGTGTTCGCGTTGCTGCTCAACAGGAATAGACC
TCCTCCTCCTTGATGACTTTAAGCTGGTACCTAATGACTTAACATACCACGTACGACCACCAAAAAGAGA
CCTCTTAAGTCATGAAAATGCAGCAACGCTGAATGATGTAAGACATTGGTCCAGCAACTATACACCACA
CTGTGCATTGAGCAGCACCAGTTAAACAAGGAAAGGGAGCTTATTGAAAGACTAGAGGATCTCAAAGAGC
AGCTGGCTCCCCTGGAAAAGGTACGAATTGAGATTAGCAGAAAAGCTGAGAAAGAGGACCCTTTGGTGTCT
ATGGGGTGGCCTTGCCATACATGGCCACACAGTTTGGCATTTTGGCCCGGCTTACCTGGTGGGAATATTCC
TGGGACATCATGGAGCCAGTAACATACTTCACTTATGGAAGTGCCATGGCAATGTATGCATATTTT
TAATGACACGCCAGGAATATGTTTATCCAGAAGCCAGAGACAGACAATACTTACTATTTTCCATAAAGG
AGCCAAAAGTACGTTTTGACCTAGAGAAATACAATCAACTCAAGGATGCAATTGCTCAGGCAGAAATG
GACCTTAAGAGACTGAGAGACCCATTACAAGTACATCTGCCTCTCCGACAAATTTGGTAAAAAGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG232429 representing NM_001270680
 Red=Cloning site Green=Tags(s)

MVHQRIASWQNLGAVYCSTVVPSSDDVTVVYQNGLPVISVRLPSRRERCQFTLKPISDSVGVFLRQLQEED
 RGIDRVAIYSPDGVRVAASTGIDLLLLDDFKLVINDLTYHVRPPKRDLLSHENAATLNDVKTLVQQLYTT
 LCIEQHQLNKERELIERLEDLKEQLAPLEKVRIEISRKAERKRTLVWGGGLAYMATQFGILARLTWWEYS
 WDIMEPVTTYFITYGSAMAMYAFVMTRQYEVVPEARDRQYLLFFHKGAKKSRFDLEKYNQLKDAIAQAEM
 DLKRLRDPLQVHPLRQIGEKD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001270680

ORF Size: 906 bp

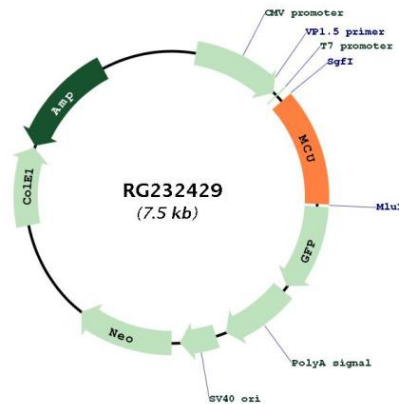
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001270680.1, NP_001257609.1</u>
RefSeq Size:	3239 bp
RefSeq ORF:	909 bp
Locus ID:	90550
UniProt ID:	<u>Q8NE86</u>
Cytogenetics:	10q22.1
Protein Families:	Transmembrane
Gene Summary:	This gene encodes a calcium transporter that localizes to the mitochondrial inner membrane. The encoded protein interacts with mitochondrial calcium uptake 1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2012]

Product images:



Circular map for RG232429