

Product datasheet for **RC233786**

MCU (NM_001270679) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCU (NM_001270679) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MCU
Synonyms:	C10orf42; CCDC109A; HsMCU
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC233786 representing NM_001270679 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGCGGCCGCCGAGGTAGATCGCTCCTGCTCCTCTCCTCTCGGGCGGGCGGGCGGGGGCGCCG
GCGGCTGCGGGCGCTGACTGCCGGTCTTCCCTGGGCTGGGCGTCAGCCGCCACCGCAGCAGCAGCA
CCACCGGACGGTACACCAGAGGATCGTTCCTGGCAGAATTTGGGAGCTGTTATTGCAGCACTGTTGTG
CCCTCTGATGATGTTACAGTGGTTATCAAATGGTTACCTGTGATATCTGTGAGGCTACCATCCCGGC
GTGAACGCTGTCACTCACACTCAAGCCTATCTCTGACTCTGTTGGTGTATTTTTACGACAACTGCAAGA
AGAGGATCGGGGAATTGACAGAGTTGCTATCTATTACCAGATGGTGTTCGCGTTGCTGCTCAACAGGA
ATAGACCTCCTCCTCTTATGACTTTAAGCTGGTCATTAATGACTTAACATACCACGTACGACCACAA
AAAGAGTAGAGATGGGGTTTTGCCATGTTGGCCAGAATGGTTTTGAACTCCTGACCTCAAGTTATCTACC
TGCCTCAGCCTCCCAAAGTGCCGAGATTATAGCCGTACGAATTGAGATTAGCAGAAAAGCTGAGAAGAGG
ACCACTTTGGTGTATGGGGTGGCCTTGCCATACATGGCCACACAGTTTGGCATTGTTGGCCCGGCTTACCT
GGTGGGAATATCCTGGGACATCATGGAGCCAGTAACATACTTCATCACTTATGGAAGTGCCATGGCAAT
GTATGCATATTTGTAATGACACGCCAGGAATATGTTTATCCAGAAGCCAGAGACAGACAATACTACTA
TTTTTCCATAAAGGAGCCAAAAGTCACGTTTTGACCTAGAGAAAACAATCAACTCAAGGATGCAATTG
CTCAGGCAGAAATGGACCTTAAGAGACTGAGAGACCCATTACAAGTACATCTGCCTCTCCGACAAATTGG
TGAAAAAGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC233786 representing NM_001270679
Red=Cloning site Green=Tags(s)

MAAAAGRLLLLSSRGGGGGAGGCGALTAGCFPLGVSRRHQQHHRTVHQRIASWQNLGAVYCSTVV
 PSDDVTVVYQNGLPVISVRLPSRRERCQFTLKPISDSVGVFLRQLQEEDRGIDRVAIYSPDGVVAASTG
 IDLLLLDDFKLVINDLTYHVRPPKRVEMGFCHVGQNGFELLTSSYLPASASQSAEIIAVRIEISRKAEKR
 TTLVLWGGLAYMATQFGILARLTWWEYSWDIMEPVTYFITYGSAAMYAYFVMTRQEYVYPEARDRQYLL
 FFHKGAKKSRFDLEKYNQLKDAIAQAEMDLKRLRDPLQVHLPLRQIGEKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001270679

ORF Size: 990 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.

RefSeq: [NM_001270679.1](#), [NP_001257608.1](#)

RefSeq Size: 2899 bp

RefSeq ORF: 993 bp

Locus ID: 90550

UniProt ID: [Q8NE86](#)

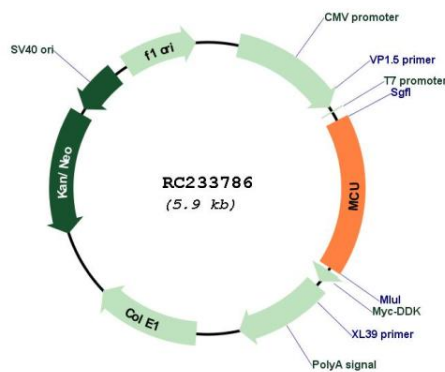
Cytogenetics: 10q22.1

Protein Families: Transmembrane

MW: 37.4 kDa

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 RC233786