

## Product datasheet for **SC118667**

### MEF2C (NM\_002397) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MEF2C (NM_002397) Human Untagged Clone
Tag:	Tag Free
Symbol:	MEF2C
Synonyms:	C5DELq14.3; DEL5q14.3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002397, the custom clone sequence may differ by one or more nucleotides

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ATGGGGAGAAAAAGATTACAGATTACGAGGATTATGGATGAACGTAACAGACAGGTGACATTTACAAAGA  
GGAAATTTGGGTTGATGAAGAAGGCTTATGAGCTGAGCGTGCTGTGACTGTGAGATTGCGCTGATCAT  
CTTCAACAGCACCAACAAGCTGTTCCAGTATGCCAGCACCGACATGGACAAAGTGCTTCTCAAGTACAG  
GAGTACAACGAGCCGCATGAGAGCCGGACAACTCAGACATCGTGGAGACGTTGAGAAAGAAGGGCCTTA  
ATGGCTGTGACAGCCCAGACCCCGATGCGGACGATTCCGTAGGTCACAGCCCTGAGTCTGAGGACAAGTA  
CAGGAAAATTAACGAAGATATTGATCTAATGATCAGCAGGCAAAGATTGTGTGCTGTTCCACCTCCCAAC  
TTCGAGATGCCAGTCTCCATCCCAGTGCCAGCCACAACAGTTTGGTGTACAGCAACCCTGTCAGCTCAC  
TGGGAAACCCCAACCTATTGCCACTGGCTCACCCCTTCTCTGCAGAGGAATAGTATGTCTCCTGGTGTAA  
ACATCGACCTCCAAGTGCAGGTAACACAGGTGGTCTGATGGTGGAGACCTCACGTCTGGTGCAGGCACC  
AGTGCAGGGAACGGGTATGGCAATCCCCGAACTCACCAGGTCTGCTGGTCTCACCTGGTAACTGAAACA  
AGAATATGCAAGCAAAATCTCCTCCCCAATGAATTTAGGAATGAATAACCGTAAACCAGATCTCCGAGT  
TCTTATTCACCAGGCAGCAAGAATACGATGCCATCAGTGTCTGAGGATGTCGACCTGCTTTTGAATCAA  
AGGATAAATAACTCCCAGTCGGCTCAGTCATTGGCTACCCAGTGGTTCCGTAGCAACTCTACTTTAC  
CAGGACAAGGAATGGGAGGATATCCATCAGCCATTTCAACAACATATGGTACCGAGTACTCTCTGAGTAG  
TGCAGACCTGTCTCTGTCTGGGTTAACACCGCCAGCGCTTTCACCTTGGTTCAGTAACTGGCTGG  
CAACAGCAACACCTACATAACATGCCACCATCTGCCCTCAGTCAGTTGGGAGCTTGCACTAGCACTCATT  
TATCTCAGAGTTCAAATCTCTCCCTGCCTTCTACTCAAAGCCTCAACATCAAGTCAGAACCTGTTTCTCC  
TCCTAGAGACCGTACCACCACCCCTTCGAGATACCCACAACACACGCGCCACGAGGCGGGGAGATCTCCT  
GTTGACAGCTTGAGCAGCTGTAGCAGTTCGTACGACGGGAGCGACCGAGAGGATCACCGAACGAATTCC  
ACTCCCCATTGGACTCACCGACCTTCGCCGGACGAAAGGGAAAGTCCCTCAGTCAAGCGCATGCGACT  
TTCTGAAGGATGGCAACATGA
```



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002397 unedited  
 NGTCAGAAATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGGTTTGGAGG  
 AACAGGAAAGAGAAAGAAAGGAAGAAATAATACTAATTTAGGGACGAGAGAGAGAAGA  
 AAAACGGGGACTATGGGGAGAAAAAGATTACGATTACGAGGATTATGGATGAACGTAAC  
 AAACAGGTGACATTTACAAGAGGAAATTTGGTTGATGAAGAAGGCTTATGAGCTGAGC  
 GTGCTGTGTGACTGTGAGATTGCGCTGATCATCTTCAACAGCACCAACAAGCTGTTCCAG  
 TATGCCAGCACCGACATGGACAAAGTGCTTCTCAAGTACACGGAGTACAACGAGCCGCAT  
 GAGAGCCGGACAACTCAGACATCGTGGAGACGTTGAGAAAGAAGGGCCTTAATGGCTGT  
 GACAGCCAGACCCCGATGCGGACGATTCCGTAGGTACAGCCCTGAGTCTGAGGACAAG  
 TACAGGAAAATTAACGAAGATATTGATCTAATGATCAGCAGGCAAAGATTGTGTGCTGTT  
 CCACCTCCCAACTTCGAGATGCCAGTCTCCATCCCAGTGTCCAGCCACAACAGTTTGGTG  
 TACAGCAACCCTGTCAGCTCACTGGAAACCCCAACCTATTGCCACTGGCTCACCTATT  
 CTGCAGAGGAATAGTATGTCTCCTGGTGAACACATCGACCTCCAAGTGCAGGTAACACA  
 GGGTGGTCTGATGGTGGAGACCTCACGTCTGGTGCAGGCACCAGTGCAGGGAACGGGTA  
 TGGCAATTCGCAATCTACCAAGTCTGCTGGTCTCACCTGGTAACTGAACAAAAATATGC  
 AAGCACAATTTCTCCCAATGATTTAGGAAGAATACCGTAACCAGTCTCCGAGTCTATAC  
 A

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_002397 unedited  
 TTTTAATATATAACACACATTNAGGNTCACNANAGGGNCCAAGGCTAGCATCCTTTATGG  
 ATACAACCAAAGGTGCATTGTGGTCTAATTGTGGATTTTCAGATCAAGTTAAGNAAAAATA  
 TAGCCTAGTTAATAAGGTCTCTTGGCTTCTGCCACCCAGCGGCAGCCTTTTACAAAAAT  
 GGGNNNAGAAACACATAAGCAACTATGCAAGTAAANANAAAGNAAAAAAAAAATGGATNNN  
 NNNNNNNNNAATGTNCTACNCCNNCCNNNTNNNNNNATNNNNNNNNNCACAGGTGG  
 ATATTACTGGCTATATCTNCTTTGCTGGGTATGTCAATGCATATGATTGGAGATGAATCG  
 ACAGATCTTCACATTCGAAGAGAAGGAAAATCTTTCTAGACTGAAATATCTTTTAAACA  
 ATATATATTGACTTTCTTATGGCACTCACTTATTAAGGGTCTGAAAATAATCCCTTATA  
 GACGAATATTANACAAGAGTCATTTTTTTAATTAAGGAAAGGGACATAGAGAGGGTTCT  
 TATGGGATTTCTTGAAATGGCTATTAATCTCTTTATTTGAGAAAAATAGATGACATAC  
 ATGCTNTATGCANAAGTGACATTTGGGGGTCTGACACACCCGGGATTNGTCAACAGTC  
 CTATATTGCTGACAAGATTGTCAAGGGTCANTTAAAAATATTTAAACGGATGACAAAAAC  
 AACTATCCCTTTACCTGGCTTCTTTCTTGGCTAGCACCCAATCTTTTAAATTTTNTCTTC  
 TGTGGGAATTATAACCTTATTACCCAAGTAAATTCATATCACCTTGTTCCTAAGGCC  
 ATTATTGCAGGAATTGGCCCCAACTTAACTTTTTTTTTTGGGCATTTTTTAAAAACCTT  
 TAAATTTAGGTTGAAACACCCGATATTTTAAATGGGCAGTTAGAAATGGCCTCCGAA  
 TCCAAAAGCTGGG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_002397

**Insert Size:**

4000 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](mailto: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](#)

**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\\_002397.2](#), [NP\\_002388.2](#)

**RefSeq Size:** 4077 bp

**RefSeq ORF:** 1422 bp

**Locus ID:** 4208

**UniProt ID:** [Q06413](#)

**Cytogenetics:** 5q14.3

**Domains:** MADS

**Protein Families:** Transcription Factors

**Protein Pathways:** MAPK signaling pathway

**Gene Summary:**

This locus encodes a member of the MADS box transcription enhancer factor 2 (MEF2) family of proteins, which play a role in myogenesis. The encoded protein, MEF2 polypeptide C, has both trans-activating and DNA binding activities. This protein may play a role in maintaining the differentiated state of muscle cells. Mutations and deletions at this locus have been associated with severe cognitive disability, stereotypic movements, epilepsy, and cerebral malformation. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2010]

Transcript Variant: This variant (1) represents the longest transcript and encodes isoform 1. Variants 1, 6, and 9-11 all encode the same isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.