

## Product datasheet for MC222964

### Myocd (NM\_145136) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myocd (NM_145136) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Myocd
Synonyms:	BSAC2A; Srfcp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC222964 representing NM_145136 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACACTCCTGGGGTCTGAACACTCTTTGCTGATTAGAAGGAAGTTCCGATCAGTCTTACAGTTACGGC  
TTCAACAGAGAAGGACCCAGGAGCAGCTGGCTAACCAAGGCTTAATACCGCCACTGAAAGGTCCAAGTGA  
ATTCCATGACCCGAGAAAACAATTGGATAGTGCCAAGACTGAAGATTCCTGAGGCGCAAGGGCAGAAAC  
AGGTCCGACCGTCCAGCCTGGTACTATGCACATTCTCCAAGCCTCCACGGCAGAAAGGTCATCCAA  
CTGCTCAGATGAAGCTCAAAGAGCCCGCCTTGACAGATGACCTCAATGAGAAGATCGCTCTCCGCCAGG  
GCCCTTGGAACTGGTGGAGAAGAATTCTGCCGATGGATTCTTCGGTGAAGAGGCTATAAAAGGTA  
GAGGTGAGCCTCTCCAAGGCAGCAGATGCATTCGCCTTTGAGGATGACAGCAGTAGAGATGGGCTCTCTC  
CAGATCAGGCTAGGAGCGAGGACCCCCAGGGCTCTACAGGATCCACCCAGACATCAAATCCACTGAGGC  
TCCTCTGGACACAATCCAGGATCTCACTCCTGGCTCAGAAAGTGACAAGAATGATGCAGCCTCCAGCCA  
GGCAACCAGTCAGACCCTGGGAAGCAGGTTCTCGGCCCTCAGCACCCGATTCTGTGCACACTGCTG  
TAAAGTCCAAGTCTTTGGGTGACAGTAAGAACCGCCACAAAAGCCAAAGACCCCAACCAAGGTGAA  
GAAGCTCAAATACCATCAGTACATCCCCCAGACCAGAAGGCAGAGAAGTCTCCCCACCCATGGACTCT  
GCCTATGCCGGTCTCCAGCAACAGCAGCTATTCCTGCAGTACAGATCCTCAGCCAGCAGCAGCAAC  
AGCAGCAGCAACAGCAGCAGCAGCAACAGCAGCAGCAGCAGCAGCAGCGGTTTCAGTACCCTGGGAT  
GCACCAACACACCTCAAAGAACCAATGAACAGATGGCCAGAAATCCGAATCCTTCTTCAACACCACTG  
AGCAATACCCCTCTATCCCTGTCAAAAATAGCATTTCTGGACAACTGGTGTCTTCTCTCAAACCGAG  
GCCCTCCACCCCAACCTGGATGATCTCAAGGTGTCAGAGTTAAGACAACAGCTTGAATCCGGGGCTT  
GCCAGTGTGAGGACCAAGACAGCGCTGGTGGACCGGCTTCGTCCTTCCAGGATTGTGCTGGCAACCTT  
GTGCCAACTTTGGGGACATCACAACCTGTACCTTTCTGTGACGCCAACACCTTGCCAGTTATCAGT  
CCTCCCCGACAGGCTTCTACCACTTTGGCAGCACAAGCTCCAGCCACCCATCTCCCCGCCTCATCTGA  
CTTGTCCGCTGCAGGGTCCCTGCCAGACACCTTACCAGTGCCTCACCTGGCTTCGGCTGCACGCATCT



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CCGGTGCCCGCCTGCACGGACGAGAGTCTGCTGAGCAGCCTGAATGGGGGCTCGGGCCCCTCCGAGCCTG
ATGGGCTAGACTCTGAGAAGGACAAGATGCTGGTGGAGAAGCAGAAAAGTGATCAACCAGCTCACCTGGAA
GCTGCGGCAAGAGCAGCGGCAGGTGGAAGAGCTGAGAATGCAACTGCAGAAGCAGAAGAGCAGCTGCAGC
GACCAGAAGCCACTGCCCTTCTTGGCCACCACCATCAAACAGGAAGATGTCTCCAGCTGCCCTTCGCAC
CCCAGCAGGCGTCTGGGAAGGGACAGGGCCACAGCTCTGACAGTCCCCCTCCGGCTTGTGAGACGGCTCA
TGCTGCTCCTCACTGTGTGGAGTCTCAGGTCAAACCCATGTACTCTCGTCCACGTTTCTCAGCCCCCAG
TGCTCCCCTCAGCACTCGCCCCGGGGGCTGAAGAGCCCGCAGCACATCAGCCTGCCTCCATCACCCA
ACAACCACTTACTTCTGGCTTCTCTTCGGGAGCTCAGAGAGAGAACCATGGGGTCTCTTACCCAGCAG
CAGCCAAGGGTGCGCACAGAAGTCAAGGGCACACGAAGGCCATTCTTCTAGCTTCTCTTCCCAGCTTCC
AGCCTCCATCAGCCTTTCTTGGCACCCAAGCAGACAGCAGTCAAGTGTGGGCTCAACCCTTGTCCCA
AAAGCCCAAGTATTCATCCAAGATGACTGGTTTACAATCTTCTGACAAGTGGGGCCAACGTTTCAAT
TCCATCCCAACTTTTTCTAAGTCAAGTTCAGCAGTTTCAGATATCACCCAGCCCCATCCTATGAAGAT
GCAGTGAAGCAGCAAATGACTCGGAGTCAGCAGATGGACGAAGTCTGGATGTCTCATTGAAAGTGGAG
AAATGCCAGCCGATGCCAGGGAAGATCATTATGTCTTCAGAAAATCCAAGATCCCTGGTCTCCTCTG
CAGCCCAACTGCCATCCCCCGAAGCCCTCGGCTTCTTTGAGCAGGCATCTTCGGGAGGCCAGATGGCC
TTCGATCACTACGCCAACGACAGTGACGAACACCTGGAAGTCTTATTGAATTCTCACAGCCCCATCGGAA
AGGTGAGCGATGTTACCCTCCTCAAATCGGAAGCGAGGAGCCTCCTTTGACAGCATCATGGATGGCTT
CCCAGGGAAGGCTGCGGAAGATCTTTCAGTGTCTCACGAGCTCTTGCCTGGGCCCCTCTCCCGATGCAT
GCACAGTTGTACCTCCTTCTGTGGACAGCAGTGGTCTGCAGCTGAGCTTACGGAATCTCCTTGGGAAA
CAATGGAATGGCTGGACCTCACTCCACCTAGTTCACGCCAGGCTTCAGCAACCTTACCTCCAGTGGGCC
CAGCATTTTCAACATCGATTTTCTGGATGTTACAGATCTTAATCTGAATCCCCTATGGATCTCCACTTA
CAGCAGTGGTAA
    
```

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-Mlul

**ACCN:**

NM\_145136

**Insert Size:**

2952 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\\_145136.4](#), [NP\\_660118.3](#)

**RefSeq Size:** 5127 bp

**RefSeq ORF:** 2952 bp

**Locus ID:** 214384

**UniProt ID:** [Q8VIM5](#)

**Cytogenetics:** 11 B3

**Gene Summary:** Smooth muscle cells (SM) and cardiac muscle cells-specific transcriptional factor which uses the canonical single or multiple CARG boxes DNA sequence. Acts as a cofactor of serum response factor (SRF) with the potential to modulate SRF-target genes. Plays a crucial role in cardiogenesis and differentiation of the smooth muscle cell lineage (myogenesis). Isoform 1 mediates the cardiac transcription factor MEF2C-dependent transcription. Isoform 1 and isoform 3 are more active than isoform 2 and isoform 4 in stimulating cardiac muscle promoters.[UniProtKB/Swiss-Prot Function]