

Product datasheet for **MR215243**

Cavin4 (NM_026509) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cavin4 (NM_026509) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cavin4
Synonyms: 2310039E09Rik; Murc
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR215243 representing NM_026509
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAACACAACGGATCAGCTTCAAATGCTGGTAAAATCCACCAGAATCGGTTGTCAAGTGTGACGGAAG
ATGAAGACCAAGACGCAGCCCTCACCATTGTGACCGTGTGGACAGAGTGGCCAGTGTGCGTGACAGTGT
GCAGGCAAGCCAGAAGAGAATTGAGGAGAGACACAGAGAAATGGGTAACGCGATAAAGTCTGTCCAATA
GACCTGCTGAAGCTCTCACAGTCACACAGCAATACGGGCTACGTTGTCAACAAGCTGTTTGAGAAGACCC
GGAAAGTCAGCGCTCACATTAAGGATGTCAAGGCCGGGTAGAGAAGCAACAGGTTTCGTGTAACCAAAGT
CGAAACCAAGCAAGAAGAAATAATGAAGAAAAACAAATTCGAGTGGTAACTTCCAGGAGGACATTC
TGCCCCGCATCCCTGTCTGTTGTTAAAGACAGAAGCCTGCCCCGAGAACCAGGAGGAGGCCGAAGAAGTCT
TCGATCCCCCAATAGAGCTCTCCTCGGATGAGGAGTATTATGTTGAAGAAAGCAGATCTGCCAGGCTTAG
GAAGTCAGGCAAAGAGCACATTGACCACATCAAGAAAGCCTTTCCAGAGAAAACATGCAGAAGACACGG
CAGACTCTTGACAAGAAAGTGAAGTGGGATTAGAAGTGGATAGTCACTCCTGAGAGGAGAGAGAGGCTGA
GGCAGTCGGGAGAGAGGCTGAGGCAGTCAGGAGAGAGGCTGAGGCAGTCGGGGGAAAGATTTAAGAAATC
GATTTCCAGTGGCGCTCCCTCAAAGGAAGCTTTAAGATTCCGAGCCTTAGGAAAGCGAAGGATCCCAAG
GCCGAGGGCCAGGAGGTAGACAGAGGGATGGGCGTGGACATCATCTCAGGTAGCCTGGCTCTGGGGCCCA
TCCATGAGTTCCTACTGATGAGTTCAAGTAAACAGAAAAGGAGGTGACCAAGGAGGGTACAGTCCCCA
AGAAGGAGGGGACCCCCAACGCCTGAGCCTTTGAAGGTGACTTTTAAACCCAGGTGAGGGTAGAGGAT
GACGAGTCACTCTGTTGGAGCTAAAGCAGTCCTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR215243 representing NM_026509
Red=Cloning site Green=Tags(s)

MEHNGSASNAGKIHQNRLLSSVTEDEDQDAALTIVTVLDRVASVVDVSVQASQKRIEERHREMGNAIKSVQI
 DLLKLSQSHSNTGYVVKLFEKTRKVSAAHKDKVKARVEKQVVRVTKVETKQEEIMKKNKFRVVFQEDIP
 CPASLSVVKDRSLPENQEEAEVFDPPIELSSDEEYVVEESRSARLRKSGKEHIDHIKKAFFSRENMQKTR
 QTLDDKVVSGIRTRIVTPERRERLRQSGERLRQSGERLRQSGERFKKSISSAAPSKEAFKIRSLRKAKDPK
 AEGQEVDRGMGVDIISGLALGPIHEFHSDEFSETEKEVTKGGYSPQEGGDPPTPEPLKVTFKPQVRVED
 DESLLELQSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9044_g02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_026509

ORF Size: 1086 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_026509.3](#), [NP_080785.2](#)

RefSeq Size: 2062 bp

RefSeq ORF: 1089 bp

Locus ID: 68016

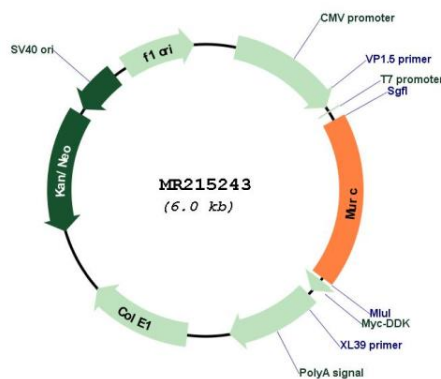
UniProt ID: [A2AMM0](#)

Cytogenetics: 4 B1

MW: 41.5 kDa

Gene Summary: Modulates the morphology of formed caveolae in cardiomyocytes, but is not required for caveolar formation. Facilitates the recruitment of MAPK1/3 to caveolae within cardiomyocytes and regulates alpha-1 adrenergic receptor-induced hypertrophic responses in cardiomyocytes through MAPK1/3 activation (PubMed:24567387). Contributes to proper membrane localization and stabilization of caveolin-3 (CAV3) in cardiomyocytes (PubMed:26497963). Induces RHOA activation and activates NPPA transcription and myofibrillar organization through the Rho/ROCK signaling pathway (PubMed:18332105). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR215243