

Product datasheet for RR207032

Cavin4 (NM_001107931) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Cavin4 (NM_001107931) Rat Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Cavin4
 Synonyms: RGD1310395
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 Cell Selection: Neomycin
 ORF Nucleotide Sequence: >RR207032 representing NM_001107931
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAACACAATGGATCTGCTTCAAATGCTGGTAAATCCACCAGAACCGATTGTCAAGTGTGACTGAAG
 ATGAAGACCAGGACGCAGCTCTACAATGTGACTGTGCTGGACAGGGTGGCCACCGTCGTGGACAGCGT
 GCAGGCAAGCCAGAAGAGAATCGAGGAGAGACACAGAGAGATGGGGAACGCCATCAAGTCTGTCCAGATA
 GACCTGCTGAAGCTCTACAATCACACAGCAACACGGGCTACGTTGTTAACAAGCTGTTTGAGAAGACCC
 GGAAAGTCAGCGCTCACATTAAGATGTGAAGGCCGGGTAGAGAAGCAACAGGTTTCGAGTAACCAAAGT
 CGAAACCAAGCAAGAAGAAATAATGAAGAAGAACAAGTTCGCGTGGTAATCTTCCAGGAGGATGTTCCC
 TGCCCCGCATCCCTGTCTGTTGTTAAAGACAGAAGCCTGCCGGAGAACGAGGAGGAAGCTGAGGAAGTCT
 TCGATCCCCCGATCGATCTCTCATCGGATGAAGAATACTATGTTGAAGAAAGCAGATCTGCCAGGCTTAG
 AAAGTCAGGCAAGAGCACATCGATCATATTAAGAAGGCATTTTCCAAGAAAACATGCAGAAGACGCGG
 CAGAATTTTGATAAGAAAGTGAGTGAATTAGAACCAGGATAGTTACACCTGAGAGAAGAGAGAGGCTGA
 GGCAGTCAGGAGAGAGGCTGAGGCAGTCGGGGGAGAGGCTGAGGCAGTCGGGGGAAAGATTTAAGAATC
 GATCTCAAATGCCACCCCTCCAAGGAAGCTTTAAGATCCGGAGCCTTAGAAAACCGAAGGACCCCAAG
 GCAGAAGGCCAGGAGGTAGACAGGGGATGGGGTGGACATCATCTCAGGTAGCCTGGCTCTGGGGCCCA
 TCCATGAGTTCCTCTGATGGGTTCAAGTAAACAGAAAAGGAGGTGACCAAAGTAGGGTACATTCCTCA
 AGAGGGAGGGGACCCCAACGCCTGAGCCTTTGAAGGTGACCTTTAACCTCAGGTGAGAGTAGAGGAT
 GACGAGTCACTCTGTTGGAATTAAGCAGTCTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RR207032 representing NM_001107931
 Red=Cloning site Green=Tags(s)

MEHNGSASNAGKIHQNRLLSSVTEDEDQDAALTIVTLDRVATVVDSVQASQKRIEERHREMGNAIKSVQI
 DLLKLSQSHSNTGYVVKLFKTRKVSAAHKDVKARVEKQVVRVTKVETKQEEIMKKNKFRVVFQEDVP
 CPASLSVVKDRSLPENEEAAEEVFDPPIDLSSDEEYVVEESRSARLRKSGKEHIDHIKAFSKENMQKTR
 QNFDKKVSGIRTRIVTPERRERLRQSGERLRQSGERLRQSGERFKKSI SNATPSKEAFKIRSLRKPDPK
 AEGQEVDRGMGVDIISGSLALGPIHEFHSDGFSETEKEVTKVGYIPQEGGDPPTPEPLKVTFKPQVRVED
 DESLLELQSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

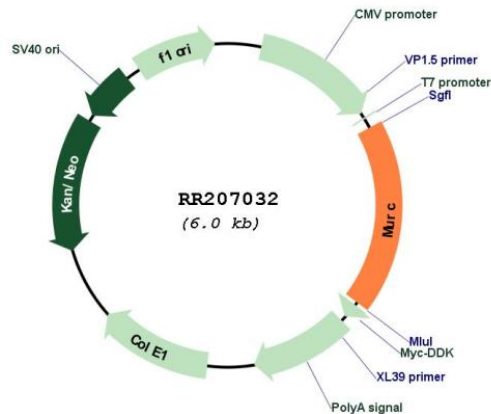
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001107931

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:	<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:	NM_001107931.2 , NP_001101401.1
RefSeq Size:	1089 bp
RefSeq ORF:	1089 bp
Locus ID:	313225
UniProt ID:	B1PRL5
Cytogenetics:	5q22
MW:	41.1 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. Contributes to proper membrane localization and stabilization of caveolin-3 (CAV3) in cardiomyocytes (By similarity). Induces RHOA activation and activates NPPA transcription and myofibrillar organization through the Rho/ROCK signaling pathway (PubMed:18332105).[UniProtKB/Swiss-Prot Function]