

## Product datasheet for **RN207032**

### Cavin4 (NM\_001107931) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cavin4 (NM\_001107931) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cavin4  
**Synonyms:** RGD1310395  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN207032 representing NM\_001107931  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGAACACAATGGATCTGCTTCAAATGCTGGTAAAATCCACCAGAACCGATTGTCAAGTGTGACTGAAG  
ATGAAGACCAGGACGCAGCTCTACAATGTGACTGTGCTGGACAGGGTGGCCACCGTCGTGGACAGCGT  
GCAGGCAAGCCAGAAGAGAATCGAGGAGAGACACAGAGATGGGGAACGCCATCAAGTCTGTCCAGATA  
GACCTGCTGAAGCTCTACAATCACACAGCAACACGGGCTACGTTGTTAAACAAGCTGTTTGAAGAAGCC  
GGAAAGTCAGCGCTCACATTAAGATGTGAAGGCCGGGTAGAGAAGCAACAGGTTTCGAGTAACCAAAGT  
CGAAACCAAGCAAGAAGAAATAATGAAGAAGAACAAGTCCCGCTGGTAATCTTCCAGGAGGATGTTCC  
TGCCCCGCATCCCTGTCTGTTGTTAAAGACAGAAGCCTGCCGGAGAACGAGGAGGAAGCTGAGGAAGTCT  
TCGATCCCCCGATCGATCTCTCATCGGATGAAGAATACTATGTTGAAGAAAGCAGATCTGCCAGGCTTAG  
AAAGTCAGGCAAGAGCACATCGATCATATTAAGAAGGCATTTTCCAAGAAAACATGCAGAAGACGCGG  
CAGAATTTTGATAAGAAAGTGAGTGAATTAGAACCAGGATAGTTACACCTGAGAGAAGAGAGAGGCTGA  
GGCAGTCAGGAGAGAGGCTGAGGCAGTCGGGGGAGAGGCTGAGGCAGTCGGGGGAAAGATTTAAGAATC  
GATCTCAAATGCCACCCCTCCAAGGAAGCTTTAAGATCCGGAGCCTTAGAAAACCGAAGGACCCCAAG  
GCAGAAGGCCAGGAGGTAGACAGGGGATGGGGTGGACATCATCTCAGGTAGCCTGGCTCTGGGGCCCA  
TCCATGAGTTCCACTCTGATGGGTTCAAGTAAACAGAAAAGGAGGTGACCAAAGTAGGGTACATCCCA  
AGAGGGAGGGGACCCCAACGCCTGAGCCTTTGAAGGTGACCTTTAAACCTCAGGTGAGAGTAGAGGAT  
GACGAGTCACTCTGTTGGAATTAAGCAGTCTCATAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001107931



|                               |  |
|-------------------------------|--|
| <b>Insert Size:</b>           | 1089 bp  |
| <b>OTI Disclaimer:</b>        | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).   |
| <b>Components:</b>            | 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).   |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>  |
| <b>RefSeq:</b>                | <u>NM_001107931.2, NP_001101401.1</u>  |
| <b>RefSeq Size:</b>           | 1089 bp  |
| <b>RefSeq ORF:</b>            | 1089 bp  |
| <b>Locus ID:</b>              | 313225   |
| <b>UniProt ID:</b>            | <u>B1PRL5</u>  |
| <b>Cytogenetics:</b>          | 5q22   |
| <b>Gene Summary:</b>          | 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] |