

## **Product datasheet for RC209277**

## CAVIN1 (NM 012232) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** CAVIN1 (NM\_012232) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: CAVIN1

Synonyms: CAVIN; cavin-1; CGL4; FKSG13; PTRF

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC209277 representing NM\_012232

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

ATGGAGGACCCCACGCTCTATATTGTCGAGCGGCCGCTTCCCGGGTACCCCGACGCCGAGGCCCCGGAGC CTTCCTCCGCTGGGGCTCAGGCAGCGGAGGAGCCGTCGGGGGCCCGCTCAGAAGAGCTGATCAAGTCGGA CCAGGTGAACGGCGTGCTGGTGCTGAGCCTCCTGGACAAAATCATCGGGGCCGTAGACCAGATCCAGCTG ACTCAAGCACAGCTGGAGGAGCGGCAGGCGGAGATGGAGGCGCAGTGCAGAGCATCCAGGGCGAGCTGA GCAAGCTGGGCAAGGCGCACCCACCACGAGCAATACGGTGAGCAAGCTGCTGGAGAAGGTGCGCAAGGT CAGCGTCAACGTGAAGACCGTGCGCGGCAGCCTGGAGCGCCAGGCGGGGCAGATCAAGAAGCTGGAGGTC AACGAGGCCGAGCTGCTGCGGCGCCGCAACTTTAAAGTCATGATCTACCAGGATGAAGTGAAGCTGCCGG CCAAACTGAGCATCAGCAAATCGCTGAAAGAGTCGGAGGCGCTGCCAGAGAAGGAGGGCGAGGAGCTGGG CGAGGGCGAGCGGCCCGAGGAGGACGCAGCGGCGCTGGAGCTTTCGTCGGACGAGGCGGTGGAGGTTGAG GAGGTTATTGAGGAGTCCCGCGCAGAGCGTATCAAGCGCAGCGGCCTGCGGCGCGTGGACGACTTCAAGA AGGCCTTCTCCAAGGAGAAGATGGAGAAGACCAAGGTGCGTACCCGCGAGAACCTGGAGAAGACGCGCCT CAAGACCAAGGAAAACCTGGAGAAGACGCGGCACACCCTGGAGAAGCGCATGAACAAGCTGGGCACGCGC CTGGTGCCCGCCGAGCGCGCGAGAAACTGAAGACGTCGCGRGACAAGTTGCGCAAATCCTTCACGCCCG ACCACGTGGTGTACGCGCGCTCCAAGACCGCGGTCTACAAGGTGCCACCCTTCACCTTCCACGTCAAGAA GATCCGCGAGGGCCAGGTGGAAGTGCTCAAGGCCACCGAGATGGTGGAGGTGGGCGCCGACGACGACGAG GGCGGCGCGGAGCGCGGGGAGGCCGGCGACCTGCGGCGCGGGAGCAGCCCCGACGTGCACGCGCTGCTGG AGATCACCGAGGAGTCGGACGCCGTGCTGGTGGACAAGAGCGACAGCGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC209277 representing NM\_012232

Red=Cloning site Green=Tags(s)

MEDPTLYIVERPLPGYPDAEAPEPSSAGAQAAEEPSGAGSEELIKSDQVNGVLVLSLLDKIIGAVDQIQL TQAQLEERQAEMEGAVQSIQGELSKLGKAHATTSNTVSKLLEKVRKVSVNVKTVRGSLERQAGQIKKLEV NEAELLRRNFKVMIYQDEVKLPAKLSISKSLKESEALPEKEGEELGEGERPEEDAAALELSSDEAVEVE EVIEESRAERIKRSGLRRVDDFKKAFSKEKMEKTKVRTRENLEKTRLKTKENLEKTRHTLEKRMNKLGTR LVPAERREKLKTSXDKLRKSFTPDHVVYARSKTAVYKVPPFTFHVKKIREGQVEVLKATEMVEVGADDDE GGAERGEAGDLRRGSSPDVHALLEITEESDAVLVDKSDSD

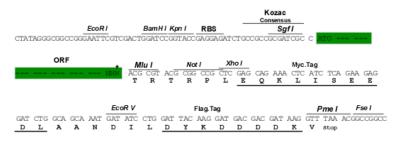
**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg2539">https://cdn.origene.com/chromatograms/mg2539</a> c07.zip

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_012232

ORF Size: 1170 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>NM 012232.6</u>

 RefSeq Size:
 3580 bp

 RefSeq ORF:
 1173 bp

 Locus ID:
 284119

 UniProt ID:
 Q6NZI2

 Cytogenetics:
 17q21.2

**Protein Families:** Transcription Factors

MW: 43.3 kDa

**Gene Summary:** This gene encodes a protein that enables the dissociation of paused ternary polymerase I

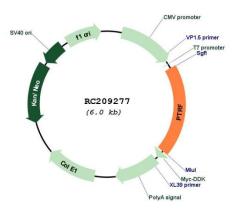
transcription complexes from the 3' end of pre-rRNA transcripts. This protein regulates rRNA transcription by promoting the dissociation of transcription complexes and the reinitiation of polymerase I on nascent rRNA transcripts. This protein also localizes to caveolae at the plasma membrane and is thought to play a critical role in the formation of caveolae and the stabilization of caveolins. This protein translocates from caveolae to the cytoplasm after insulin stimulation. Caveolae contain truncated forms of this protein and may be the site of phosphorylation-dependent proteolysis. This protein is also thought to modify lipid

metabolism and insulin-regulated gene expression. Mutations in this gene result in a disorder characterized by generalized lipodystrophy and muscular dystrophy. [provided by RefSeq,

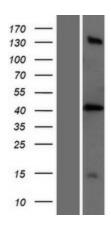
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## **Product images:**

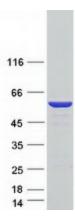


Circular map for RC209277



Western blot validation of overexpression lysate (Cat# [LY402171]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209277 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified CAVIN1 protein (Cat# [TP309277]). The protein was produced from HEK293T cells transfected with CAVIN1 cDNA clone (Cat# RC209277) using MegaTran 2.0 (Cat# [TT210002]).