

Product datasheet for **RC221140**

Caveolin 3 (CAV3) (NM_033337) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Caveolin 3 (CAV3) (NM_033337) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Caveolin 3
Synonyms: LGMD1C; LQT9; MPDT; RMD2; VIP-21; VIP21
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC221140 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGGCAGAAGAGCACACAGATCTCGAGGCCAGATCGTCAAGGATATCCACTGCAAGGAGATTGACC
TGGTGAACCGAGACCCCAAGAACATTAACGAGGACATAGTCAAGGTGGATTTGAAGACGTGATCGCAGA
GCCTGTGGGCACCTACAGCTTTGACGGCGTGTGGAAGGTGAGCTACACCACCTTCACTGTCTCCAAGTAC
TGGTGCTACCGTCTGTTGTCCACGCTGCTGGGCGTCCCCTGCTCTGGGGCTTCTGTTTCGCT
GCATCTCCTTCTGCCACATCTGGGCGGTGGTGCATGCATTAAGAGCTACCTGATCGAGATCCAGTGCAT
CAGCCACATCTACTCACTCTGCATCCGCACCTTCTGCAACCCACTTTCGCGGCCCTGGCCAGGTCTGC
AGCAGCATCAAGGTGGTCTGCGGAAGGAGGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221140 protein sequence
Red=Cloning site Green=Tags(s)
MMAEEHTDLEAQIVKDIHCKEIDLVNRDPKNINEDIVKVFEDVIAEPVGTYSFDGVWVKSYYTFTVSKY
WCYRLLSTLLGVPLALLWGFLFACISFCHIWAHVPCIKSYLIEIQCISHIYSLCIRTFCNPLFAALGQVC
SSIKVLRKEV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6447_e07.zip



[View online >](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_033337

ORF Size: 453 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_033337.3](#)

RefSeq Size: 1435 bp

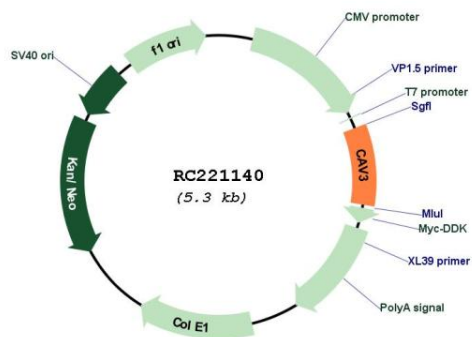
RefSeq ORF: 456 bp

Locus ID: 859

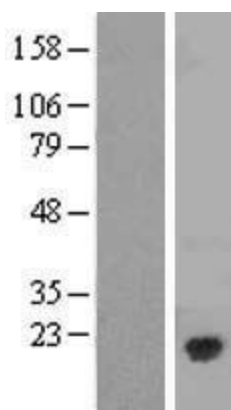
UniProt ID: [P56539](#)
Cytogenetics: 3p25.3
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Focal adhesion
MW: 17.3 kDa

Gene Summary: This gene encodes a caveolin family member, which functions as a component of the caveolae plasma membranes found in most cell types. Caveolin proteins are proposed to be scaffolding proteins for organizing and concentrating certain caveolin-interacting molecules. Mutations identified in this gene lead to interference with protein oligomerization or intra-cellular routing, disrupting caveolae formation and resulting in Limb-Girdle muscular dystrophy type-1C (LGMD-1C), hyperCKemia or rippling muscle disease (RMD). Alternative splicing has been identified for this locus, with inclusion or exclusion of a differentially spliced intron. In addition, transcripts utilize multiple polyA sites and contain two potential translation initiation sites. [provided by RefSeq, Jul 2008]

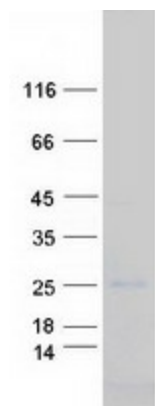
Product images:



Circular map for RC221140



Western blot validation of overexpression lysate (Cat# [LY409590]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221140 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CAV3 protein (Cat# [TP321140]). The protein was produced from HEK293T cells transfected with CAV3 cDNA clone (Cat# RC221140) using MegaTran 2.0 (Cat# [TT210002]).