

#### OriGene Technologies, Inc.

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# Product datasheet for RG221140

### Caveolin 3 (CAV3) (NM\_033337) Human Tagged ORF Clone

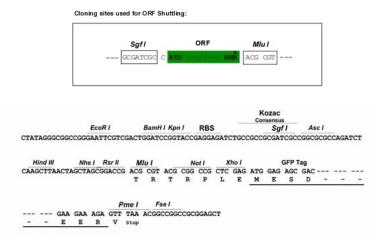
### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Caveolin 3 (CAV3) (NM_033337) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Caveolin 3
Synonyms:	LGMD1C; LQT9; MPDT; RMD2; VIP-21; VIP21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	<pre>&gt;RG221140 representing NM_033337 Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGATGGCAGAAGAGCACACAGATCTCGAGGCCCAGATCGTCAAGGATATCCACTGCAAGGAGATTGACC TGGTGAACCGAGACCCCAAGAACATTAACGAGGAGACATAGTCAAGGTGGATTTTGAAGACGTGATCGCAGA GCCTGTGGGCACCTACAGCTTTGACGGCGTGTGGAAGGTGAGCTACACCACCTTCACTGTCTCCAAGTAC TGGTGCTACCGTCTGTTGTCCACGCTGCTGGGGCGTCCCACTGGCCCTGCTCTGGGGCTTCCTGTTCGCCT GCATCTCCTTCTGCCACATCTGGGCGGTGGTGCCATGCATTAAGAGCTACCTGATCGAGATCCAGTGCAT CAGCCACATCTACTCACTCTGCATCCGCACCTTCTGCAACCCACTCTTCGCGGCCCTGGGCCAGGTCTGC AGCAGCATCAAGGTGGTGCCGGAAGGAGGTC
	ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA
Protein Sequence:	<pre>&gt;RG221140 representing NM_033337 Red=Cloning site Green=Tags(s)</pre>
	MMAEEHTDLEAQIVKDIHCKEIDLVNRDPKNINEDIVKVDFEDVIAEPVGTYSFDGVWKVSYTTFTVSKY WCYRLLSTLLGVPLALLWGFLFACISFCHIWAVVPCIKSYLIEIQCISHIYSLCIRTFCNPLFAALGQVC SSIKVVLRKEV
	TRTRPLE - GFP Tag - V
Restriction Sites:	Sgfl-Mlul



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#### **Cloning Scheme:**



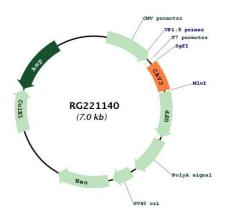
ACCN:	NM_033337
ORF Size:	453 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
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> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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>
RefSeq:	<u>NM 033337.3</u>
RefSeq Size:	1425 bp
RefSeq ORF:	456 bp
Locus ID:	859
UniProt ID:	<u>P56539</u>

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## Caveolin 3 (CAV3) (NM\_033337) Human Tagged ORF Clone – RG221140

Cytogenetics:	3p25.3
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Focal adhesion
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 intracellular 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 RG221140

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