

OriGene Technologies, Inc.

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Product datasheet for RC229591

Caveolin 1 (CAV1) (NM_001172897) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Caveolin 1 (CAV1) (NM_001172897) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Caveolin 1
Synonyms:	BSCL3; CGL3; LCCNS; MSTP085; PPH3; VIP21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<pre>>RC229591 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGGCAGACGAGCTGAGCGAGAAGCAAGTGTACGACGCGCACACCAAGGAGATCGACCTGGTCAACCGCG ACCCTAAACACCTCAACGATGACGTGGTGAGAGATTGACTTTGAAGATGTGATTGCAGAACCAGAAGGGAC ACACAGTTTTGACGGCATTTGGAAGGCCAGCTTCACCACCTTCACTGTGACGAAATACTGGTTTTACCGC TTGCTGTCTGCCCTCTTTGGCATCCCGATGGCACTCATCTGGGGCATTTACTTCGCCATTCTCTTTCC TGCACATCTGGGCAGTTGTACCATGCATTAAGAGCTTCCTGATTGAGATTCAGTGCATCAGCCGTGTCTA TTCCATCTACGTCCACACCGTCTGTGACCCACTCTTTGAAGCTGTTGGGAAAAATATTCAGCAATGTCCGC ATCAACTTGCAGAAAGAAATA
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAG GTTTAA
Protein Sequence:	>RC229591 protein sequence <mark>Red</mark> =Cloning site Green=Tags(s)
	MADELSEKQVYDAHTKEIDLVNRDPKHLNDDVVKIDFEDVIAEPEGTHSFDGIWKASFTTFTVTKYWFYR LLSALFGIPMALIWGIYFAILSFLHIWAVVPCIKSFLIEIQCISRVYSIYVHTVCDPLFEAVGKIFSNVR INLQKEI
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/ja1449_g03.zip



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Caveolin 1 (CAV1) (NM_001172897) Human Tagged ORF Clone – RC229591

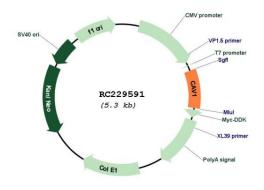
naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u> This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. 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). 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.	Restriction Sites:	Sgfl-Mlul
Level with the result of the scale of the	Cloning Scheme:	Sgfi ORF Miu I
 ar cros cal call are for APC one one that the one call call are one call of the Accordance of the temp 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 This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. 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). Chertrifuge at 5,000xg for 5min. Carefully open the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. Sotore the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C. NM 001172897.2 2446 bp 444 bp 		EcoRI BamHI Kpn I RBS Sgf I CTATAGGGCGGCCCGGAATTCGTCGACTGGATCGGGTACCGGGGAGGGCGCGGGATCGCC KTG
 NM_001172897 441 bp 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 This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. 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). 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. <u>NM_001172897.2</u> 2446 bp 444 bp 		GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TAA ACGGCCGGGCC
 441 bp 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> This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. 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). 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. <u>NM 001172897.2</u> 2446 bp 444 bp 		* The last codon before the Stop codon of the ORF
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2446 bp 444 bp	Reconstitution Method:	 Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of
444 bp	RefSeq:	<u>NM 001172897.2</u>
•	efSeq Size:	2446 bp
857	efSeq ORF:	444 bp
	ocus ID:	857
	RefSeq Size: RefSeq ORF: Locus ID:	444 bp

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Caveolin 1 (CAV1) (NM_001172897) Human Tagged ORF Clone – RC229591

Cytogenetics: Protein Families: Protein Pathways:	7q31.2 Druggable Genome, Transmembrane Focal adhesion, Viral myocarditis
MW:	17 kDa
Gene Summary:	The scaffolding protein encoded by this gene is the main component of the caveolae plasma membranes found in most cell types. The protein links integrin subunits to the tyrosine kinase FYN, an initiating step in coupling integrins to the Ras-ERK pathway and promoting cell cycle progression. The gene is a tumor suppressor gene candidate and a negative regulator of the Ras-p42/44 mitogen-activated kinase cascade. Caveolin 1 and caveolin 2 are located next to each other on chromosome 7 and express colocalizing proteins that form a stable hetero-oligomeric complex. Mutations in this gene have been associated with Berardinelli-Seip congenital lipodystrophy. Alternatively spliced transcripts encode alpha and beta isoforms of caveolin 1.[provided by RefSeq, Mar 2010]

Product images:



Circular map for RC229591

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