

Product datasheet for **RG229589**

Caveolin 1 (CAV1) (NM_001172895) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Caveolin 1 (CAV1) (NM_001172895) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: CAV1
Synonyms: BSCL3; CGL3; LCCNS; MSTP085; PPH3; VIP21
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG229589 representing NM_001172895
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGACGAGCTGAGCGAGAAGCAAGTGTACGACGCGCACACCAAGGAGATCGACCTGGTCAACCGC
ACCCTAAACACCTCAACGATGACGTGGTCAAGATTGACTTTGAAGATGTGATTGCAGAACCAGAAGGGAC
ACACAGTTTTGACGGCATTGGAAGGCCAGCTTACCACCTTCACTGTGACGAAATACTGGTTTTACCGC
TTGCTGTCTGCCCTTTGGCATCCCGATGGCACTCATCTGGGGCATTACTTCGCCATTCTCTCTTTCC
TGCACATCTGGGAGTTGTACCATGCATTAAGAGCTTCCTGATTGAGATTCAGTGCATCAGCCGTGTCTA
TTCCATCTACGTCCACACCGTCTGTGACCCACTTTTGAAGCTGTTGGGAAAATATTCAGCAATGTCCGC
ATCAACTTGCAGAAAGAATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG229589 representing NM_001172895
Red=Cloning site Green=Tags(s)

MADLSEKQVYDAHTKEIDLVNRDPKHLNDDVVKIDFEDVIAEPEGTHSFDGIWKASFTTFTVTKYWFYR
LLSALFGIPMALIWGIYFAILSFLHIWAVVPCIKSFLIEIQICISRVSIIYVHTVCDPLFEAVGKIFSNVR
INLQKEI

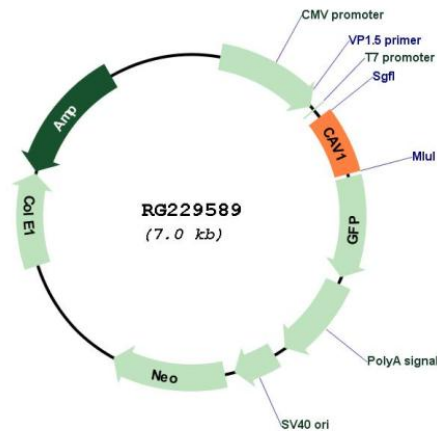
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001172895

ORF Size: 441 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:	<ol style="list-style-type: none">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:	<u>NM_001172895.1, NP_001166366.1</u>
RefSeq Size:	3212 bp
RefSeq ORF:	444 bp
Locus ID:	857
Cytogenetics:	7q31.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Focal adhesion, Viral myocarditis
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]