

## Product datasheet for **SC328229**

### Caveolin 1 (CAV1) (NM\_001172897) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Caveolin 1 (CAV1) (NM_001172897) Human Untagged Clone   |
| Tag:                      | Tag Free  |
| Symbol:                   | CAV1  |
| Synonyms:                 | BSCL3; CGL3; LCCNS; MSTP085; PPH3; VIP21  |
| Mammalian Cell Selection: | None  |
| Vector:                   | <u><a href="#">pCMV6-XL5</a></u>  |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| Fully Sequenced ORF:      | >NCBI ORF sequence for NM_001172897, the custom clone sequence may differ by one or more nucleotides<br>ATGGCAGACGAGCTGAGCGAGAAGCAAGTGTACGACGCGCACACCAAGGAGATCGACCTG<br>GTCAACCGCGACCCTAAACACCTCAACGATGACGTGGTCAAGATTGACTTTGAAGATGTG<br>ATTGCAGAACCAGAAGGGACACACAGTTTTGACGGCATTGGAAGGCCAGCTTACCACCC<br>TTCCTGTGACGAAATACTGGTTTTACCCTTGCTGTCTGCCCTTTGGCATCCCGATG<br>GCACTCATCTGGGGCATTACTTCGCCATTCTCTTTCTGCACATCTGGGCAGTTGTA<br>CCATGCATTAAGAGCTTCTGATTGAGATTCAGTGCATCAGCCGTGTCTATTCCATCTAC<br>GTCCACACCGTCTGTGACCCACTCTTTGAAGCTGTTGGGAAAATATTCAGCAATGTCGC<br>ATCAACTTGCAGAAAGAAATATAA |
| Restriction Sites:        | Please inquire  |
| ACCN:                     | NM_001172897  |
| OTI Disclaimer:           | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).  |
| OTI Annotation:           | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.  |
| 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).  |



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**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\\_001172897.1](#), [NP\\_001166368.1](#)

**RefSeq Size:** 2446 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]

Transcript Variant: This variant (4) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream start codon, compared to variant 1. The encoded isoform (beta) is shorter than isoform alpha. Variants 2, 3 and 4 encode the same isoform.