

Product datasheet for **RG202703**

Caveolin 2 (CAV2) (NM_001233) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Caveolin 2 (CAV2) (NM_001233) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Caveolin 2
Synonyms: CAV
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG202703 representing NM_001233
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGCTGGAGACGGAGAAGGCCGGACGTACAGCTCTTCATGGACGACGACTCCTACAGCCACCACAGCG
 GCCTCGAGTACGCCGACCCGAGAAGTTCGCGGACTCGGACCAGGACCGGGATCCCCACCGGCTCAACTC
 GCATCTCAAGCTGGGCTTCGAGGATGTGATCGCAGAGCCGGTACTACGCACTCCTTTGACAAAGTGTGG
 ATCTGCAGCCATGCCCTTTGAAATCAGCAAATACGTAATGTACAAGTTCCTGACGGTGTCTCTGGCCA
 TTCCCCTGGCCTTCATTGCGGGAATTCTCTTTGCCACCCTCAGCTGTCTGCACATCTGGATTTAATGCC
 TTTTGTAAAGACCTGCCTAATGGTTCGCTTCAGTGCAGACAATATGGAAGAGTGTGACAGATGTTATC
 ATTGCTCCATTGTGTACGAGCGTAGGACGATGCTTCTTCTGTGACCTGCAACTGAGCCAGGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG202703 representing NM_001233
 Red=Cloning site Green=Tags(s)

MGLETEKADVQLFMDSDSYSHHSGLEYADPEKFADSDQDRDPHRLNSHLKLGFEVDIAEPVTTTHSFDKVM
 ICSHALFEISKYVMYKFLTVFLAIPAFIAGILFATLSCLHIWILMPFVKTCMLMVLPSVQTIWKSVDVI
 IAPLCTSVGRCFSSVSLQLSQD

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_001233

ORF Size: 486 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_001233.5](#)

RefSeq Size: 3332 bp

RefSeq ORF: 489 bp

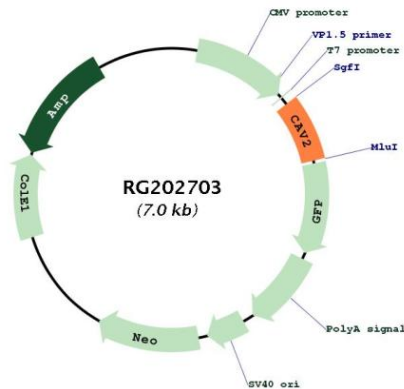
Locus ID: 858

UniProt ID: [P51636](#)

Cytogenetics: 7q31.2
Domains: Caveolin
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Focal adhesion
Gene Summary:

The protein encoded by this gene is a major component of the inner surface of caveolae, small invaginations of the plasma membrane, and is involved in essential cellular functions, including signal transduction, lipid metabolism, cellular growth control and apoptosis. This protein may function as a tumor suppressor. This gene and related family member (CAV1) are located next to each other on chromosome 7, and express colocalizing proteins that form a stable hetero-oligomeric complex. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. Additional isoforms resulting from the use of alternate in-frame translation initiation codons have also been described, and shown to have preferential localization in the cell (PMID:11238462). [provided by RefSeq, May 2011]

Product images:



Circular map for RG202703