

Product datasheet for RC202703

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: Myc-DDK
Symbol: CAV2
Synonyms: CAV
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202703 representing NM_001233
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGCTGGAGACGGAGAAGGCCGGACGTACAGCTCTTCATGGACGACGACTCCTACAGCCACCACAGCG
 GCCTCGAGTACGCCACCCGAGAAGTTCGCGGACTCGGACCAGGACCGGGATCCCCACCGGCTCAACTC
 GCATCTCAAGCTGGGCTTCGAGGATGTGATCGCAGAGCCGGTACTACGACTCCTTTGACAAAGTGTGG
 ATCTGCAGCCATGCCCTCTTTGAAATCAGCAAATACGTAATGTACAAGTTCCTGACGGTGTCTCTGGCCA
 TTCCCCTGGCCTTCATTGCGGGAATTCTCTTTGCCACCCTCAGCTGTCTGCACATCTGGATTTAATGCC
 TTTTGTAAAGACCTGCCTAATGGTTCGCTTCAGTGCAGACAATATGGAAGAGTGTGACAGATGTTATC
 ATTGCTCCATTGTGTACGAGCGTAGGACGATGCTTCTTCTGTGACCTGCAACTGAGCCAGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202703 representing NM_001233
 Red=Cloning site Green=Tags(s)

MGLETEKADVQLFMDSDSYSHHSGLEYADPEKFADSDQDRDPHRLNSHLKLGFEVDIAEPTVTHSFDKVV
 ICSHALFEISKYVMYKFLTVFLAIPLAFIAGILFATLSCLHIWILMPFVKTCMLMVLPSVQTIWKSVDVI
 IAPLCTSVGRCFSSVSLQLSQD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

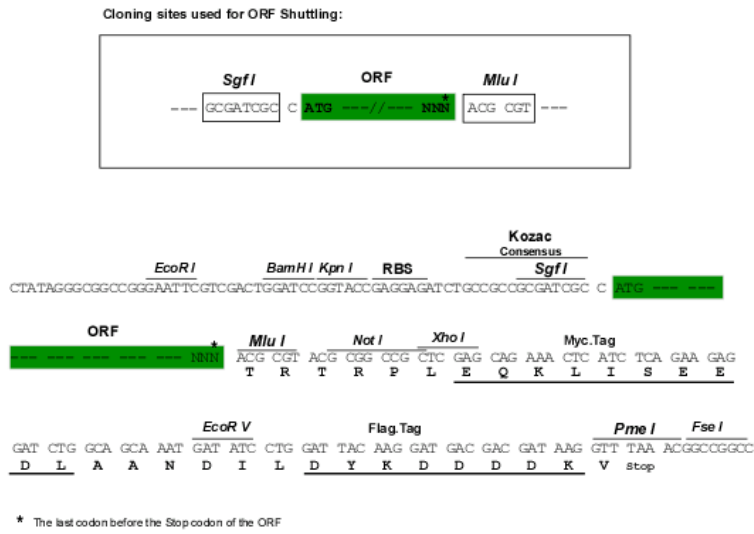
Chromatograms: https://cdn.origene.com/chromatograms/mg2448_e09.zip



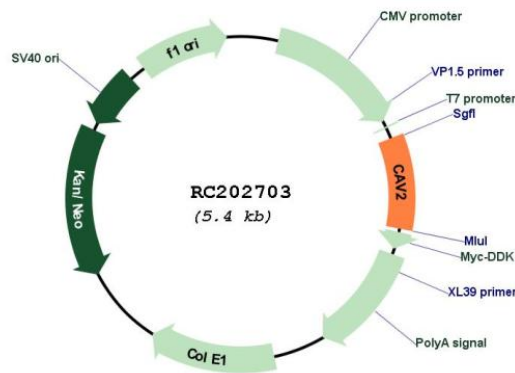
[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001233

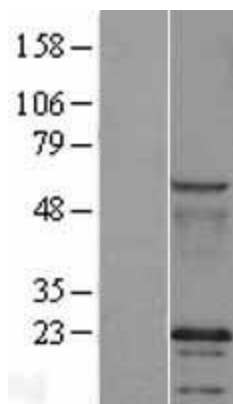
ORF Size: 486 bp

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](#)

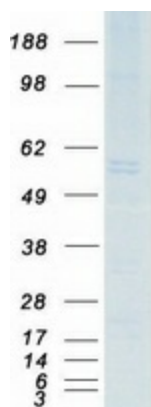
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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:	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
MW:	18.1 kDa
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:



Western blot validation of overexpression lysate (Cat# [LY420057]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202703 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CAV2 protein (Cat# [TP302703]). The protein was produced from HEK293T cells transfected with CAV2 cDNA clone (Cat# RC202703) using MegaTran 2.0 (Cat# [TT210002]).