

Product datasheet for RC231850

Caveolin 2 (CAV2) (NM_001206747) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Caveolin 2 (CAV2) (NM_001206747) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CAV2
Synonyms: CAV
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC231850 representing NM_001206747
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGACGACGACTCCTACAGCCACCACAGCGGCTCGAGTACGCCGACCCGAGAAGTTCGCGGACTCGG
ACCAGGACCGGGATCCCCACGGCTCAACTCGCATCTCAAGCTGGGCTTCGAGGATGTGATCGCAGAGCC
GGTGACTACGACTCCTTTGACAAAGTGTGGATCTGCAGCCATGCCCTCTTTGAAATCAGCAAATACGTA
ATGTACAAGTTCCTGACGGTGTTCCTGGCCATCCCTGGCCTTATTGGGGAATTCTCTTTGCCACCC
TCAGCTGTCTGCACATCTGGATTTAATGCCTTTGTAAAGACCTGCCTAATGGTTCTGCCTTCAGTGCA
GACAATATGGAAGAGTGTGACAGATGTTATCATTGCTCCATTGTGTACGAGCGTAGGACGATGCTTCTCT
TCTGTCAGCCTGCAACTGAGCCAGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC231850 representing NM_001206747
 Red=Cloning site Green=Tags(s)

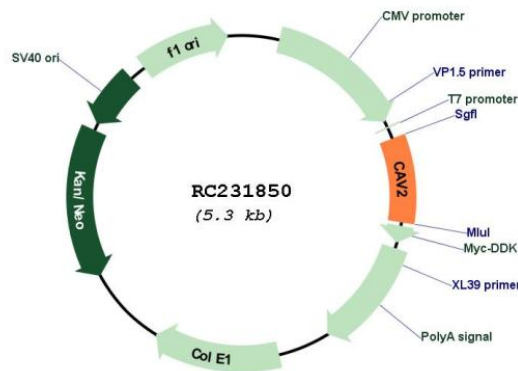
MDDDSYSHHSGLEYADPEKFADSDQDRDPHRLNSHLKLGFEVDIAEPVTTHSFDKVVICSHALFEISKYV
 MYKFLTVFLAIPLAFIAGILFATLSCLHIWILMPFVKTCMLVLPVQTIWKSVDVIIAPLCTSVGRFCF
 SVSLQLSQD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



Cloning Scheme:

Plasmid Map:


ACCN: NM_001206747

ORF Size: 447 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_001206747.2</u>
RefSeq Size:	3121 bp
RefSeq ORF:	450 bp
Locus ID:	858
UniProt ID:	<u>P51636</u>
Cytogenetics:	7q31.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Focal adhesion
MW:	17.3 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]