

Product datasheet for RC217364

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

Caveolin 2 (CAV2) (NM_198212) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Caveolin 2 (CAV2) (NM_198212) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Caveolin 2

Synonyms: CAV

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC217364 representing NM_198212

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGGCTGGAGACGGAGAAGGCCGACCTACAGCTCTTCATGGACGACGACTCCTACAGCCACCACGCGGCCTCGAGTACGCCGACCCCGAGAAGTTCGCGGACTCGGACCAGGACCGGGATCCCCACCGGCTCAACTCGCATCTCAAGGATTTTAATGCCTTTTGTAAAGACCTGCCTAATGGTTCTGCCTTCAGTGCAGACAATATGGAAGAGTGTGACAGATGTTATCATTGCTCCATTGTGTACGAGCGATGGACGATGCTTCTCTTCTGTCAGC

CTGCAACTGAGCCAGGATTGAATACTTGGACCCCAGGTCTGGAGATTGGGATACTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217364 representing NM_198212

Red=Cloning site Green=Tags(s)

MGLETEKADVQLFMDDDSYSHHSGLEYADPEKFADSDQDRDPHRLNSHLKDFNAFCKDLPNGSAFSADNM

EECDRCYHCSIVYERRTMLLFCQPATEPGLNTWTPGLEIGIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2482 b05.zip

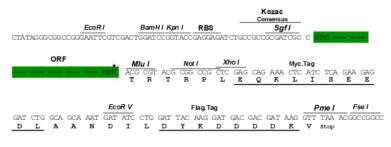
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_198212

ORF Size: 336 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: <u>NM 198212.3</u>

RefSeq Size: 3144 bp RefSeq ORF: 339 bp Locus ID: 858



 UniProt ID:
 P51636

 Cytogenetics:
 7q31.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Focal adhesion

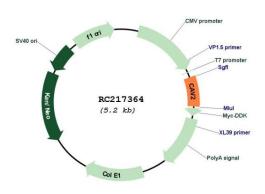
MW: 12.6 kDa

Gene Summary: The protein encoded by this gene is a major component of the inner surface of caveolae,

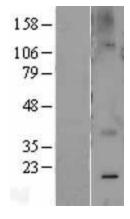
small invaginations of the plasma membrane, and is involved in essential cellular functions, including signal transduction, lipid metabolism, cellular growth control and apoptosis. This protein may function as a tumor suppressor. This gene and related family member (CAV1) are located next to each other 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:



Circular map for RC217364



Western blot validation of overexpression lysate (Cat# [LY403682]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217364 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).