

Product datasheet for **RC216340**

Villin (VIL1) (NM_007127) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Villin (VIL1) (NM_007127) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Villin
Synonyms:	D2S1471; VIL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216340 representing NM_007127
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACCAAGTGTAGCGCCCAAGTCAAAGGCTCTCTCAACATCACACCCCGGGGCTGCAGATATGGAGGA
 TCGAGGCCATGCAGATGGTGCCTTTCCTTCCAGCACCTTTGGAAGCTTCTTCGATGGTACTGCTACAT
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 CAAGAGACTACAGGAAGAAAACCTGGTCATCACCCCCGGCTCTTTGAGTGTCCAAAGACTGGGCGC
 TTCTGGCCACAGAGATCCCTGACTTCAATCAGGATGACTTGGAAAGGATGATGTGTTCTACTAGATG
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ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216340 representing NM_007127
Red=Cloning site Green=Tags(s)

MTKLSAQVKGSLNITTPGLQIWRIEAMQMPVPSSTFGSFFDGDYIILAIHKTASSLSYDIHYWIGQDS
SLDEQGAAYITTMDDFLKGRAVQHREVQGNSEAFRGYFKQGLVIRKGGVASGMKHVETNSYDVQRLL
HVKGKRNVVAGEVEMSWKSFNRGDVFLDLGKLIQWNGPESTRMERLRGMTLAKEIRDQERGGRTYVGV
VDGENELASPKLMEVMNHVLGKRRELKAAVPDTVVEPALKAALKLYHVSDSEGNLVVREVATRPLTQDLL
SHEDCYILDQGGKLIYVWKGKKANEQEKKGAMSHALNFIKAKQYPPSTQVEVQNDGAESAVFQQLFKWT
ASNRTSGLGKTHTVGSVAKVEQVKFDATSMHVKPQVAAQKQMVDDGSGEVQVWRIENLELVPVDSKWLGH
FYGGDCYLLLYTYLIGEKQHLLYVWQGSQASQDEITASAYQAVILDQKYNQEPVQIRVPMGKEPPHMS
IFKGRMVVYQGGTSRTNNLETGPSTRLFQVQGTGANNTKAFEVPPARANFLNSNDVFLKTSQCCYLWCGK
GCSGDEREMAKMVADTISRTEKQVVVEGQEPANFWMALGGKAPYANTKRLQEENLVITPRLFECSSNKTGR
FLATEIPDFNQDDLEEDDVFLLDVVDQVFFWIGKHANEEKAAATTAQEYKTHPSGRDPETPIIVVKQ
GHEPPTFTGWFLAWDPFKWSNTKSYEDLKAELGNSRDWSQITAEVTSVKVDVFNANSNLSSGPLIFPLE
QLVKNPVEELPEGVDPSRKEEHLSEDFTQAFGMTAAFSALPRWKQQLKKEKGLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8017_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:


ACCN: NM_007127

ORF Size: 2481 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_007127.3](#)

RefSeq Size: 2702 bp

RefSeq ORF: 2484 bp

Locus ID: 7429

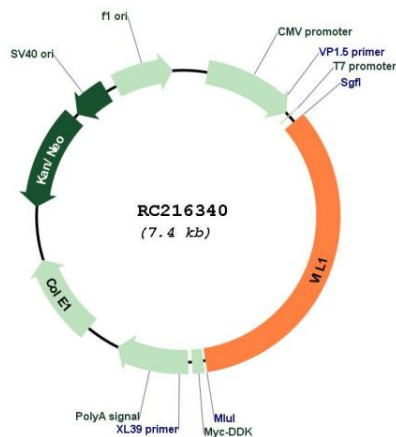
UniProt ID: [P09327](#)

Cytogenetics: 2q35

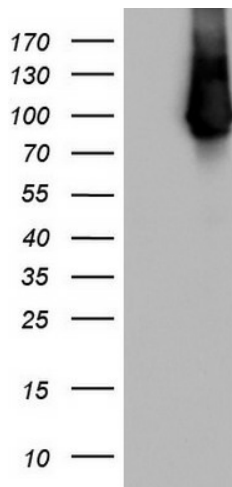
MW: 92.5 kDa

Gene Summary: This gene encodes a member of a family of calcium-regulated actin-binding proteins. This protein represents a dominant part of the brush border cytoskeleton which functions in the capping, severing, and bundling of actin filaments. Two mRNAs of 2.7 kb and 3.5 kb have been observed; they result from utilization of alternate poly-adenylation signals present in the terminal exon. [provided by RefSeq, Jul 2008]

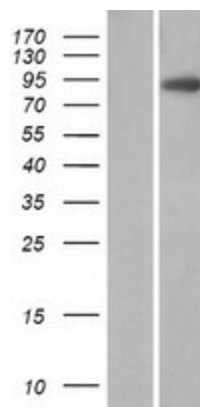
Product images:



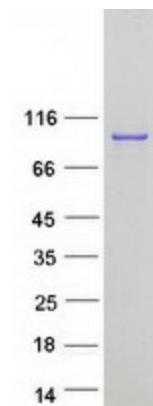
Circular map for RC216340



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY VIL1 (Cat# RC216340, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-VIL1 (Cat# [TA803236]). Positive lysates [LY416173] (100ug) and [LC416173] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416173]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216340 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified VIL1 protein (Cat# [TP316340]). The protein was produced from HEK293T cells transfected with VIL1 cDNA clone (Cat# RC216340) using MegaTran 2.0 (Cat# [TT210002]).