

Product datasheet for **MR210849**

Vil1 (NM_009509) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Vil1 (NM_009509) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Vil1
Synonyms:	Vil
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR210849 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTAAACTGAATGCCAAGTCAAAGGCTCTCTCAACATCACCACTCCCGGGATACAGATATGGAGGA
 TCGAGGCTATGCAGATGGTACCTGTTCTTCCAGCACCTTGGAAAGCTTCTTCGATGGTACTGCTATGT
 AGTCTGGCTATCCACAAGACCAGCAGCACTCTCTCTATGATATCCACTACTGGATTGGCCAGGACTCG
 TCCCAGGATGAGCAGGGGCGAGTCCATCTACACCACACAGATGGATGACTACCTGAAGGGCCGGGCTG
 TCCAGCACCGGAGGTTCAAGGCAACGAGAGCGAGACTTCCGGAGCTACTTCAAGCAAGGCCTTGAT
 CCGGAAAGGGGAGTGGCTTCCGGCATGAAGCAGTGAACAACTCTGTGATGTCCAGCGACTGTTG
 CACGTCAAGGGCAAGAGGAATGTCTGGCTGGAGAGGTGAAATGTCCTGGAAGAGTTTCAACAGAGGGG
 ATGTTCTCTGCTGGACCTTGGGAAGCTTATTATCCAGTGAATGGCCAGAGAGTAACCGCATGGAGAG
 ACTTCCGGGCATGGCCTTGGCCAAAGAGATCCGAGACCAGGAACGGGGTGGAGTACCTACGTAGGTGTG
 GTGGACGGGGAGAAGGAAGGGGACTCCCCACAGCTGATGGCAATTATGAACCACGTGCTGGGCCACGCA
 AAGAACTGAAGGCTGCTATTTCTGACTCAGTGGTGGAGCCGGCCGCTAAGGCTGCACTCAAGCTGTACCA
 TGTGTCTGACTCCGAAGGAAAATGGTGGTTAGAGAAGTTGCTACTCGGCCACTCACACAAGACCTGCTC
 AAGCATGAGGACTGTTACATCCTGGACCAGGGAGGCCTGAAGATCTTGTGTGGAAGGAAAAAATGCCA
 ACGTCCAGGAGAGGAGCGGAGCCATGAGCCAGGCCTTGAACCTCATCAAAGCCAAGCAGTACCCACCGAG
 CACGCAGGTTGAGGTGCAAGATGACGGGGCCGAGTCCCCATCTTCAACAACCTTCCAGAAGTGGACA
 GTGCCAACCCGGACCTCAGGCCTCGGCAAAACCCACACTGTGGCTCTGTGGCTAAGGTGGAACAGGTGA
 AGTTTGTGCTCTGACCATGCATGTACAACCTCAGGTGGCTGCCAGCAGAAAATGGTGGATGACGGGGG
 TGGGGAAGTGCAGGTGTGGCGCATCGAGGACTTGGAGCTGGTGCCTGTGGAGTCCAAGTGGCTGGGCCAT
 TTCTACGGTGGTACTGCTACCTGCTGCTACACCTACCTCATAGGGGAAAAGCAACACTACTTGTAT
 ATATCTGGCAGGGCAGCCAGGCCAGGATGAAATTGCAGCCTCGGCGTATCAAGCCGTCTGTTGGA
 CCAGAAGTACAATGACGAGCCAGTACAGATCCGGGTACGATGGGCAAGGAGCCGCTCACCTCATGTCT
 ATCTTCAAGGGCCGATGGTGGTTTATCAGGGAGGCACCTCCCGAAAGAACAACCTGGAGCCTGTGCCCT
 CTACGAGGCTATTTAGGTCCGAGGGACCAATGCTGATAACACCAAGGCTTTTGAGGTGACAGCCCGGGC
 CACGTCCCTCACTCCAATGATGTCTTCACTCAAGACTCCGTCTGCTGCTACCTGTGGTGTGGGAAG
 GGCTGCAGTGGGGATGAGAGGGAGATGGCCAAGATGGTTGCTGATACCATCTCTCGACGGAGAAACAAG
 TGGTAGTAGAGGGCAGGAGCCAGCCAACCTTCTGGATGGCTCTGGGCGGGAAGGCCCTACGCCAACAC
 CAAGAGGCTGCAGGAGGAAAACCAAGTCACTCCTCGGCTCTTCGAGTGTCCAACAGACCGGACGC
 TTTCTGGCCACAGAGATCTTGACTTCAATCAGGATGACCTGGAGGAGGAGGATGTGTTCTATTGGATG
 TCTGGGACCAGGTCTTCTTCTGGATAGGGAAAACATGCCAATGAGGAAGAGAAGAAGGCTGCAGCTACAAC
 TGTACAAGAATACCTCAAGACCCACCTGGAAACCGAGACCTTGAGACCCTATCATCGTGGTGAAGCAG
 GGACACGAGCCCCCACCTTACAGGCTGGTTCCTGGCTGGGATCCCTCAAGTGGAGTAAACCAAAAT
 CCTATGATGACCTTAAGGCAGAGCTGGGAACTCTGGGACTGGAGCCAGATTGCTGACGAGGTTATGAG
 CCCGAAAGTGGAGTTTTCACTGCCAATACCAGTCTGAGTCTGGGCCCTGCCACCTTCCCCCTGGAG
 CAGCTGGTAAACAAGTCTGTAGAGGATCTCCTGAGGGTGTGGACCCAGCAGGAAGGAGGACCTGT
 CCACCGAAGACTTCACTAGGCCTTGGGCATGACTCCAGCTGCCTTCTGCCCCTGCCTCGATGGAGCA
 AAAAAACATCAAGAAAGAAAAGGACTGTTT

ACGCGTACGCGGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210849 protein sequence

Red=Cloning site Green=Tags(s)

MTKLNAQVKGSLNITTPGIQIWRIEAMQMPVPSSTFGSFFDGDYVVLAIHKTSSTLSYDIHYWIGQDS
SQDEQGAAYITTMDDYLKGRAVQHREVQGNSETFRSYFKQGLVIRKGGVASGMKHVETNSCDVQRLL
HVKGKRNVLAGEVEMSWKSFNRGDVFLDLGKLIQWNGPESNRMERLRGMALAKEIRDQERGGRTYVGV
VDGEKEGDSPLMAIMNHVLPKELKAAISDSVVEPAKAAKLYHVSDSEGKLVVREVATRPLTQDLL
KHEDCYILDQGGKIFVWKGKNANAQERSGAMSQALNFIKAKQYPPSTQVEVQNDGAESPFIQQLFKWT
VPNRTSGLGKTHTVGSVAKVEQVKFDALTMHVQPQVAAQKQMVDDGSGEVQVWRIEDLELVPVESKWLGH
FYGGDCYLLLYTYLIGEKQHLLYIWQGSQASQDEIAASAYQAVLLDQKYNDEPVQIRVTMGKEPPHMS
IFKGRMVVYQGGTSRKNLEPVPSTRLFQVRGTNADNTKAFEVTARATSLNSNDVFIKTPSCCYLWCGK
GCSGDEREMAKMVADTISRTEKQVVVEGQEPANFWMALGGKAPYANTKRLQENQVITPRLFECNSQTGR
FLATEIFDFNQDDLEEDVFLDVWDQVFFWIGKHANEEKAAATTVQEYKTHPGNRDLETPIIVVKQ
GHEPPTFTGWFLAWDPFKWSNTKSYDDLKAEKLSGDSQIADEVMSPKVDVFTANTSLSSGPLTFPLE
QLVNKSVEDLPEGVDPSRKEEHLSTEDFTRALGMTAAFSALPRWKQNIKKEKGLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

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_009509.2](#)

RefSeq Size: 3117 bp

RefSeq ORF: 2484 bp

Locus ID: 22349

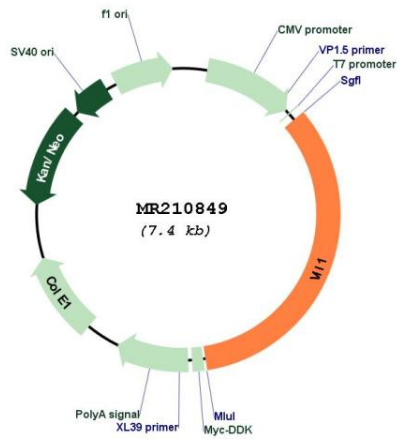
UniProt ID: [Q62468](#)

Cytogenetics: 1 38.54 cM

MW: 92.8 kDa

Gene Summary: Epithelial cell-specific Ca(2+)-regulated actin-modifying protein that modulates the reorganization of microvillar actin filaments. Plays a role in the actin nucleation, actin filament bundle assembly, actin filament capping and severing. Binds phosphatidylinositol 4,5-bisphosphate (PIP2) and lysophosphatidic acid (LPA); binds LPA with higher affinity than PIP2. Binding to LPA increases its phosphorylation by SRC and inhibits all actin-modifying activities. Binding to PIP2 inhibits actin-capping and -severing activities but enhances actin-bundling activity. Regulates the intestinal epithelial cell morphology, cell invasion, cell migration and apoptosis. Protects against apoptosis induced by dextran sodium sulfate (DSS) in the gastrointestinal epithelium. Appears to regulate cell death by maintaining mitochondrial integrity. Enhances hepatocyte growth factor (HGF)-induced epithelial cell motility, chemotaxis and wound repair. Upon *S.flexneri* cell infection, its actin-severing activity enhances actin-based motility of the bacteria and plays a role during the dissemination.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210849