

## Product datasheet for **RC239642**

### **MVP (NM\_001293205) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MVP (NM_001293205) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MVP
Synonyms:	LRP; VAULT1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC239642 representing NM\_001293205  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCAACTGAAGAGTTCATCATCCGCATCCCCCATACCACTATATCCATGTGCTGGACCAGAACAGCA  
 ACGTGTCCCGTGTGGAGGTCGGGCCAAAGACCTACATCCGGCAGGACAATGAGAGGGTACTGTTTGCCCC  
 CATGCGCATGGTGACCGTCCCCCACGTACTACTGCACAGTGGCCAACCCTGTGTCTCGGGATGCCAG  
 GGCTTGGTGTGTTGATGTACAGGGCAAGTTCGGCTTCGCCACGCTGACCTCGAGATCCGGCTGGCCC  
 AGGACCCCTTCCCCTGTACCCAGGGGAGGTGCTGAAAAGGACATCACACCCCTGCAGGTGGTTCTGCC  
 CAACACTGCCCTCCATCTAAAGGCGCTGCTTGATTTTGAGGATAAAGATGGAGACAAGGTGGTGGCAGGA  
 GATGAGTGGCTTTTCGAGGGACCTGGCACGTACATCCCCGGAAGGAAGTGGAGGTCGTGGAGATCATT  
 AGGCCACCATCATCAGGCAGAACCAGGCTCTGCGGCTCAGGGCCCAGGAGTGTGGACCGGGACGG  
 CAAGGAGAGGGTGACAGGGGAAGATGGCTGGTACCACAGTAGGGCGTACCTCCAGCGGTGTTTGAG  
 GAGGTTCTGGATTTGGTGGACGCCGTATCCTTACGGAAGACAGCCCTGCACCTCCGGCTCGCGGA  
 ACTTCCGGGACTTCAGGGGAGTGTCCCGCCGACTGGGGAGGAGTGGCTGGTAACAGTGCAGGACACAGA  
 GGCCACGTGCCAGATGTCCACGAGGAGGTGCTGGGGTGTGCCCATCACACCCCTGGGCCCCACAAC  
 TACTGCGTGATTCTCGACCCTGTGCGACCGGATGGCAAGAATCAGCTGGGCAGAAAGCGCGTGGTCAAGG  
 GAGAGAAGTCTTTTTCTCCAGCCAGGAGAGCAGCTGGAACAAGGCATCCAGGATGTGTATGTGCTGTC  
 GGAGCAGCAGGGGCTGCTGCTGAGGGCCCTGCAGCCCTGGAGGAGGGGGAGGATGAGGAGAAGGTCTCA  
 CACCAGGCTGGGACCACTGGCTCATCCGCGACCCCTGGAGTATGTGCCATCTGCCAAAGTGGAGGTGG  
 TGGAGGAGCGCCAGGCCATCCCTCTAGACGAGAACGAGGGCATCTATGTGCAGGATGTCAAGACCGGAA  
 GGTGCGCGCTGTGATTGGAAGCACCTACATGCTGACCCAGGACGAAGTCCCTGTGGGAGAAAAGAGTGCCT  
 CCCGGGTGGAGGAGCTGCTGAACAAGGGCAGGACCCTCTGGCAGACAGGGGTGAGAAGGACACAGCTA  
 AGAGCCTCCAGCCCTTGGCGCCCCGGAACAAGACCCGTGTGGTACAGTACCGCGTCCCCACAACGCTGC  
 GGTGCAGGTGTACGACTACCGAGAGAAGCGAGCCCGCACTTTGAGGTGAATGACCGGAAGGACCCCAA  
 GAGACGGCAAGCTCTTTTCAGTGCCAGACTTTGTAGGTGATGCCTGCAAAGCCATCGCATCCCGGGTGC  
 GGGGGCCGTGGCCTCTGTCACCTTCGATGACTCCATAAGAAGTCCAGCCGCATCATTGCACTGCTGT  
 CTTTGGCTTTGAGACCTCGGAAGCGAAGGGCCCCGATGGCATGGCCCTGCCAGGCCCGGGACAGGCT  
 GTCTTCCCCAAAACGGGCTGGTGGTCAAGCAGTGTGGACGTGCAGTCAAGTGGAGCCTGTGGATCAGAGGA  
 CCCGGGACGCCCTGCAACGCAGCGTCCAGCTGGCCATCGAGATCACCAACTCCAGGAAGCGGCGGC  
 CAAGCATGAGGCTCAGAGACTGGAGCAGGAAGCCCGCGGCGGCTTGAGCGGCAGAAGATCCTGGACCAG  
 TCAGAAGCCGAGAAAGCTCGCAAGGAACCTTTGGAGCTGGAGGCTCTGAGCATGGCCGTGGAGAGCACCG  
 GGACTGCCAAGGCGGAGGCCGAGTCCCCTGCGGAGGCAGCCCGGATTGAGGGAGAAGGGTCCGTGCTGCA  
 GGCAAGCTAAAAGCACAGGCCTTGCCATTGAAACGGAGGCTGAGCTCCAGAGGGTCCAGAAGGTCCGA  
 GAGCTGGAAGTGGTCTATGCCCGGGCCAGCTGGAGCTGGAGGTGAGCAAGGCTCAGCAGCTGGCTGAGG  
 TGGAGGTGAAGAAGTTCAAGCAGATGACAGAGGCCATAGGCCCCAGCACCATCAGGGACCTTGTGTGGC  
 TGGCCTGAGATGCAGGTAAAAGTGTCCAGTCCCTGGGCTGAAATCAACCCTCATACCGATGGCTCC  
 ACTCCCATCAACCTCTTCAACACAGCCTTTGGCTGCTGGGGATGGGGCCGAGGGTCAAGCCCTGGGCA  
 GAAGGTTGGCCAGTGGGCCAGCCCTGGGAGGGGATATCCCCCAGTCTGCTCAGGCCCTCAAGCTCC  
 TGGAGACAACCAGTGGTGCCTGTACTGCGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239642 representing NM\_001293205  
Red=Cloning site Green=Tags(s)

MATEEFIIIRIPPYHYIHVLDQNSNVSVEVGPPTYIRQDNERVLFAPMRMVTVPPRHYCTVANPVS RDAQ  
GLVLFDTVGTQVRLRHADLEIRLAQDPFPLYPGEVLEKDI TPLQVVL PNTALHLKALLDFEDKDGKVVAG  
DEWLFEGPGTYIPRKEVEVVEIIQATIIIRQNQALRLRARKECWDRD GKERTV TGEEWLVTTVGAYLPAVFE  
EVLDLVDAVILTEKTALHLRARRNFRDFRGVSRRTGEEWLVTVQDTEAHVPDVHEEVLGVVPITTLGPHN  
YCVILDPVGPDGKNQLGQKRVVKGESFFLQPGEQLEQGIQDVYV LSEQQLLLRALQPLEEGEDEEKVS  
HQAGDHWLIRGPLEYVPSAKVEVVEERQAIPLDENEGIYVQDVKTGKVRAVIGSTYMLTQDEVLWEKELP  
PGVEELLNKGQDPLADRGEKDTAKSLQPLAPRNKTRVVS YRVPHNAAVQVYDYREKRARHFEVNDRKDPQ  
ETAKLFSVPDFVGDACKAIASRVRGAVASVTFDDFHKNSARIIRTAVFGFETSEAKGPDGMALPRPRDQA  
VFPQNGLVSSVDVQSVPEVDQRTDALQRSVQLAIEIT TNSQEA AAKHEAQRLEQEARGRLERQKILDQ  
SEAEKARKELLELEALSMAVESTGTAKAEAESRAEAARIEGEGSVLQAKLKAQALAIETEAE LQRVQKVR  
ELELVYARAQLELEVSKAQQLAEVEVKFKQMTEAIGPSTIRDLAVAGPEMQVLLQSLGLKSTLITDGS  
TPINLFNTAFGLLGMGPEGQPLGRRVASGSPGEGISPQSAQAPQAPGDNHVVPLR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

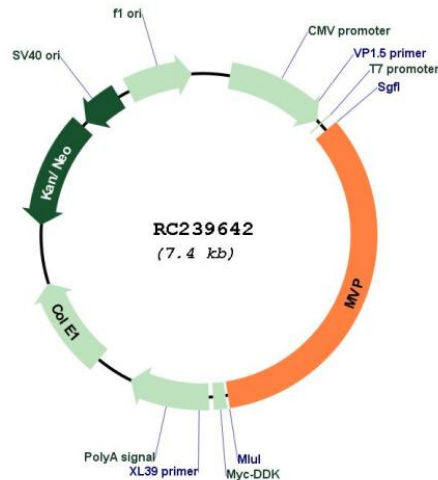
Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001293205

**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\\_001293205.1](#), [NP\\_001280134.1](#)

**RefSeq Size:** 2587 bp

**RefSeq ORF:** 2484 bp

**Locus ID:** 9961

**UniProt ID:** [Q14764](#)

**Cytogenetics:** 16p11.2

**Protein Families:** Druggable Genome

**MW:** 92.4 kDa

**Gene Summary:** This gene encodes the major component of the vault complex. Vaults are multi-subunit ribonucleoprotein structures that may be involved in nucleo-cytoplasmic transport. The encoded protein may play a role in multiple cellular processes by regulating the MAP kinase, JAK/STAT and phosphoinositide 3-kinase/Akt signaling pathways. The encoded protein also plays a role in multidrug resistance, and expression of this gene may be a prognostic marker for several types of cancer. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, May 2012]