

## Product datasheet for **RC213533**

### **MVP (NM\_017458) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MVP (NM_017458) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MVP
Synonyms:	LRP; VAULT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC213533 representing NM\_017458  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAACTGAAGAGTTCATCATCCGCATCCCCCATACCACTATATCCATGTGCTGGACCAGAACAGCA  
 ACGTGTCCCGTGTGGAGGTCGGGCCAAAGACCTACATCCGGCAGGACAATGAGAGGGTACTGTTTGCCCC  
 CATGCGCATGGTGACCGTCCCCCACGTCACACTGACAGTGGCCAACCCTGTGTCTCGGGATGCCAG  
 GGCTTGGTGTGTTGATGTCACAGGGCAAGTTCGGCTTCGCCACGCTGACCTCGAGATCCGGCTGGCCC  
 AGGACCCCTTCCCCTGTACCCAGGGGAGGTGCTGAAAAGGACATCACACCCCTGCAGGTGTTTCTGCC  
 CAACACTGCCCTCCATCTAAAGGCGCTGCTTGATTTTGGAGATAAAGATGGAGACAAGGTGGTGGCAGGA  
 GATGAGTGGCTTTTCGAGGGACCTGGCACGTACATCCCCGGAAGGAAGTGGAGGTCGTGGAGATCATT  
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 GGCCACGTGCCAGATGTCCACGAGGAGGTGCTGGGGTGTGCCCATCACACCCCTGGGCCCCACAAC  
 TACTGCGTGATTCTCGACCTGTCCGACCGGATGGCAAGAATCAGCTGGGCGAGAAGCGCGTGGTCAAGG  
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 GGAGCAGCAGGGGCTGCTGCTGAGGGCCCTGCAGCCCTGGAGGAGGGGGAGGATGAGGAGAAGGTCTCA  
 CACCAGGCTGGGACCCTGGCTCATCCGCGACCCCTGGAGTATGTGCCATCTGCCAAAGTGGAGGTGG  
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 GGTGCGCGCTGTGATTGGAAGCACCTACATGCTGACCCAGGACGAAGTCTGTGGGAGAAAAGAGCTGCCT  
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 AGAGCCTCCAGCCCTTGGCGCCCGGAACAAGACCCGTGTGGTACAGTACCGCGTGGCCACAACGCTGC  
 GGTGCAGGTGTACGACTACCGAGAGAAGCGAGCCCGCGTGGTCTTCGGGCTGAGCTGGTGTGCTGGGT  
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 TCAGAGACTGGAGCAGGAAGCCCGCGCCGGCTTGAGCGGCAGAAGATCCTGGACCAAGTCCAGAGCCGAG  
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 AGTTCAAGCAGATGACAGAGGCCATAGGCCAGCACCATCAGGGACCTTGTGTGGCTGGGCTGAGAT  
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 CGTGGTGCCTGTACTGCGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC213533 representing NM\_017458  
 Red=Cloning site Green=Tags(s)

MATEEFIIIRIPPYHYIHVLDQNSNVSVEVGPPTYIRQDNERVLFAPMRMVTVPPRHYCTVANPVSRAQ  
 GLVLFDTVGTQVRLRHADLEIRLAQDPFPLYPGEVLEKDIITPLQVVLNPTALHLKALLDFEDKDGDKVVG  
 DEWLFEGPGTYIPRKEVEVVEIIQATIIRQNQALRLRARKECWRDRDGKERVTGEEWLVTTVGAYLPAVFE  
 EVLDDLVDVAVILTEKTALHLRARRNFRDFRGVSRRTGEEWLVTVQDTEAHVPDVHEEVLGVVPIITLGP  
 YCVILDPVGPDGKQNLGQKRVVKGESFFLQPGEQLEQGIQDVYVYVLSQQGLLLRALQPLEEGEDEEKVS  
 HQAGDHWLIRGPLEYVPSAKVEVVEERQAIPLDENEGIYVQDVKTGKVRVAVIGSTYMLTQDEVLWEKELP  
 PGVEELLNKGQDPLADRGEKDTAKSLQPLAPRNKTRVVSYPVPHNAAVQVYDYREKRARVVFPELVSLG  
 PEEQFTVLSLSAGRPKRPHARRALCLLLGPDFFTDVTITETADHARLQLLAYNWHFEVNRKDPQETAK  
 LFSVPDFVGDACKAIASRVRGAVASVTFDDFHKNSARIIRTAVFGFETSEAKGPDGMALPRPRDQAVFPQ  
 NGLVVSSVDVQSVPEVDQRTRDALQRSVQLAIEITTNSEQEAAAKHEAQRLEQEARGLERQKILDQSEAE  
 KARKELLEALSMAVESTGTAKAEAESRAEAARIEGEGSVLQAKLKAQALAIETEAELQRVQKRELEL  
 VYARAQLELEVSKAQQLAEEVEVKKFKQMTAIGPSTIRDLAVAGPEMQVKLLQSLGLKSTLITDGGSTPIN  
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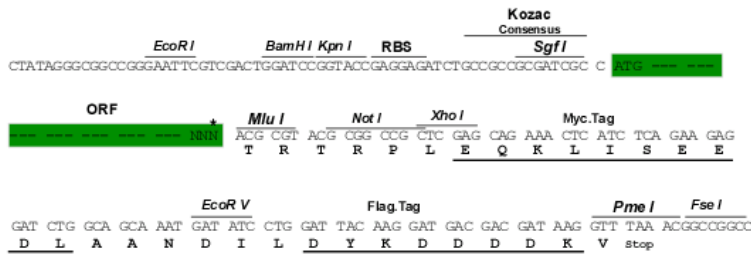
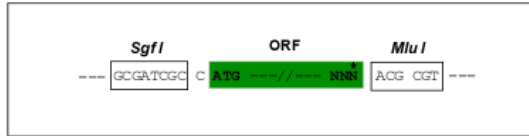
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6258\\_c01.zip](https://cdn.origene.com/chromatograms/mk6258_c01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

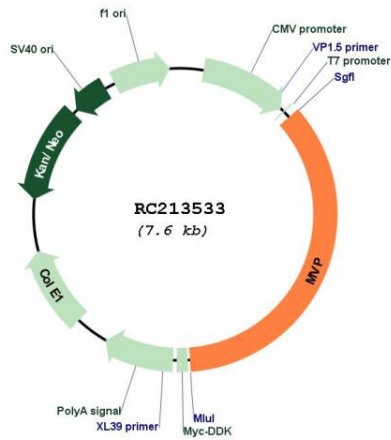


\* The last codon before the Stop codon of the ORF

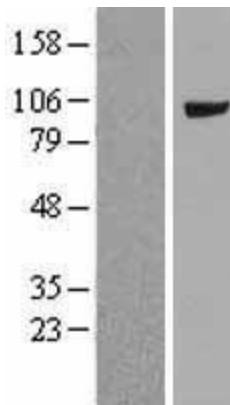
**ACCN:** NM\_017458

<b>ORF Size:</b>	2679 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_017458.3</a>
<b>RefSeq Size:</b>	2857 bp
<b>RefSeq ORF:</b>	2682 bp
<b>Locus ID:</b>	9961
<b>UniProt ID:</b>	<a href="#">Q14764</a>
<b>Cytogenetics:</b>	16p11.2
<b>Domains:</b>	Vault
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	99.1 kDa
<b>Gene Summary:</b>	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]

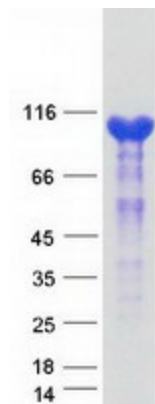
Product images:



Circular map for RC213533



Western blot validation of overexpression lysate (Cat# [LY413762]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213533 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MVP protein (Cat# [TP313533]). The protein was produced from HEK293T cells transfected with MVP cDNA clone (Cat# RC213533) using MegaTran 2.0 (Cat# [TT210002]).