

## Product datasheet for **RC217713**

### VR1 (TRPV1) (NM\_080705) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	VR1 (TRPV1) (NM_080705) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VR1
Synonyms:	VR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC217713 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAGAAATGGAGCAGCACAGACTTGGGGCAGCTGCGGACCCACTCCAAAAGGACACCTGCCAGACC  
 CCCTGGATGGAGACCCTAACTCCAGGCCACCTCCAGCCAAGCCCCAGCTCTCCACGGCCAAGAGCCGCAC  
 CCGGCTCTTTGGGAAGGGTGACTCGGAGGAGGCTTCCCGGTGGATTGCCCTCACGAGGAAGGTGAGCTG  
 GACTCCTGCCGACCATCACAGTCAGCCCTGTTATCACCATCCAGAGGCCAGGAGACGGCCCCACCGGTG  
 CCAGGCTGCTGTCCAGGACTCTGTGCCGCCAGCACCAGAGAAGACCCTCAGGCTCTATGATCGCAGGAG  
 TATCTTTGAAGCCGTTGCTCAGAATAACTGCCAGGATCTGGAGAGCCTGCTGCTTCTGCAGAAGAGC  
 AAGAAGCACCTCACAGACAACGAGTTCAAAGACCCTGAGACAGGGAAGACCTGTCTGCTGAAAGCCATGC  
 TCAACCTGCACGACGGACAGAACACCACCATCCCCTGCTCCTGGAGATCGCGCGGCAAACGGACAGCCT  
 GAAGGAGCTTGTCAACGCCAGCTACACGGACAGCTACTACAAGGGCCAGACAGCACTGCACATCGCCATC  
 GAGAGACGCAACATGGCCCTGGTACCCTCCTGGTGGAGAACGGAGCAGACGTCCAGGCTGCGGCCCATG  
 GGGACTTCTTTAAGAAAACCAAAGGGCGGCCCTGGATTCTACTTCGGTGAAGTCCCTGTCCCTGGCCG  
 GTGCCAACACAGCTGGGCATCGTGAAGTTCCTGCTGCAGAACTCCTGGCAGACGGCCGACATCAGCGCC  
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 AGTTTGTGACGAGCATGTACAATGAGATTCTGATCCTGGGGGCCAAACTGCACCCGACGCTGAAGCTGGA  
 GGAGCTCACCAACAAGAAGGGAATGACGCCGCTGGCTCTGGCAGCTGGGACCGGGAAGATCGGGGTCTTG  
 GCCTATATTCTCCAGCGGAGATCCAGGAGCCCGAGTGCAGGCACCTGTCCAGGAAGTTCACCGAGTGGG  
 CCTACGGGCCCGTGCACTCCTCGCTGTACGACCTGTCTGCATCGACACCTGCGAGAAGAAGTTCGGTGG  
 GGAGGTGATCGCCTACAGCAGCAGCGAGACCCCTAATCGCCACGACATGCTCTTGGTGGAGCCGCTGAAC  
 CGACTCCTGCAGGACAAGTGGGACAGATTCTGCAAGCGCATCTTCTACTTCAACTTCTGGTCTACTGCC  
 TGTACATGATCATCTTACCATGGCTGCCTACTACAGGCCGTTGGATGGCTTGCCTCCCTTAAAGATGGA  
 AAAAACTGGAGACTATTTCCGAGTACTGGAGAGATCCTGTCTGTGTTAGGAGGAGTCTACTTCTTTTTTC  
 CGAGGGATTAGTATTTCTGCAGAGGCCGCCGTCGATGAAGACCCTGTTTGTGGACAGCTACAGTGAGA  
 TGCTTTTCTTTCTGCAGTCACTGTTTCTGCTGGCCACCGTGGTGTACTTACGCCACCTCAAGGAGTA  
 TGTGGCTTCCATGGTATTCTCCCTGGCCTTGGGCTGGACCAACATGCTCTACTACACCCGCGGTTTCCAG  
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 ACATCGTCTTCTTGTCCGGTTTTCCACAGCGGTGGTGCAGCTGATTGAAGACGGGAAGAATGACTCCCT  
 GCCGCTGAGTCCACGTGCACAGGTGGCGGGGCCCTGCCTGCAGGCCCCCGATAGCTCCTACAACAGC  
 CTGTACTCCACCTGCCTGGAGCTGTTCAAGTTCACCATCGGCATGGGCGACCTGGAGTTCCTGAGAACT  
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 CAGAGAGCCATCACCATCCTGGACACGGAGAAGAGCTTCTTAAGTGCATGAGGAAGGCCTTCCGCTCAG  
 GCAAGCTGCTGCAGGTGGGTACACACCTGATGGCAAGGACGACTACCGGTGGTGTCTCAGGTGGACGA  
 GGTTGAAGTGGACACCTGGAACACCAACGTGGGCATCATCAACGAAGACCCGGGCAACTGTGAGGGCGTC  
 AAGCGCACCTGAGCTTCTCCCTGCGGTCAAGCAGAGTTTCAGGCAGACACTGGAAGAAGTTCCTGCTGG  
 TCCCCCTTTAAGAGAGGCAAGTCTCGAGATAGGCACTGCTCAGCCCAGGAAGTTTATCTGCGACA  
 GTTTTCAGGGTCTCTGAAGCCAGAGGACGCTGAGGTCTTCAAGAGTCTGCCGCTTCCGGGGAGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC217713 protein sequence  
Red=Cloning site Green=Tags(s)

MKKWSSTDLGAAADPLQKDTCPDPLDGDPNRPPPAKPQLSTAKSRTRLFGKGDSEEAFPVDCPHEEGEL  
DSCPTITVSPVITIQRPDGPPTGARLLSQDSVAASTEKTLRLYDRRSIFEAVAQNNCQDLESLLLFLQKS  
KKHLTDNEFKDPETGKTCLLKAMLNLDHGQNTTIPLLLEIARQTDLSKELVNASYTDSYKGTALHIAI  
ERRNMALVTLVENGADVQAAAHGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLQNSWQTADISA  
RDSVGNVTLHALVEVADNTADNTKFTVSMYNEILILGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGVL  
AYILQREIQEPECRHLSRKFTWAYGPHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHMMLLVEPLN  
RLLQDKWDRFVKRIFYFNFLVYCLYMIIFTMAAYRVPDGLPPFKMEKTGDYFRVTGEILSVLGGVYFFF  
RGIQYFLQRRPSMKTLFVDSYSEMLFFLQSLFMLATVVLYFSLKEYVASMVFLALGWTNMLYYTRGFQ  
QMGYAVMIEKMILRDLCRFMFVYIVFLFGFSTAVVTLIEDGKNDSLPESTSHRWRGPACRPPDSSYNS  
LYSTCLELKFFTIGMGDLEFTENYDFKAVFIILLLAYVILTYILLNMLIALMGETVNKIAQESKNIWKL  
QRAITILDTEKSFLLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTWNTNVGIINEDPGNCEGV  
KRTLSFSLRSSRVSGRHWNFALVPLLREASARDRQSAQPPEEVYLRQFSGSLKPDAEVFKSPAASGEK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6097\\_a03.zip](https://cdn.origene.com/chromatograms/mk6097_a03.zip)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_080705

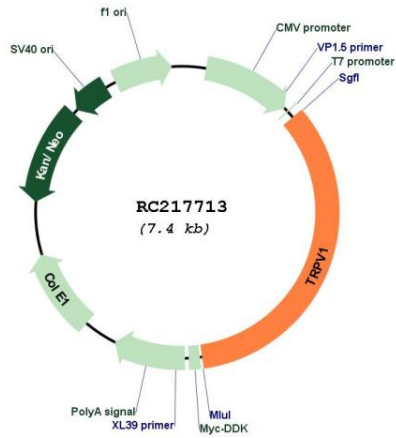
**ORF Size:** 2517 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

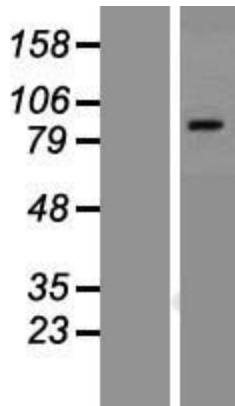
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<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>	<u><a href="#">NM_080705.4</a></u>
<b>RefSeq Size:</b>	4117 bp
<b>RefSeq ORF:</b>	2520 bp
<b>Locus ID:</b>	7442
<b>UniProt ID:</b>	<u><a href="#">Q8NER1</a></u>
<b>Cytogenetics:</b>	17p13.2
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
<b>Protein Pathways:</b>	Neuroactive ligand-receptor interaction
<b>MW:</b>	94.9 kDa
<b>Gene Summary:</b>	Capsaicin, the main pungent ingredient in hot chili peppers, elicits a sensation of burning pain by selectively activating sensory neurons that convey information about noxious stimuli to the central nervous system. The protein encoded by this gene is a receptor for capsaicin and is a non-selective cation channel that is structurally related to members of the TRP family of ion channels. This receptor is also activated by increases in temperature in the noxious range, suggesting that it functions as a transducer of painful thermal stimuli in vivo. Four transcript variants encoding the same protein, but with different 5' UTR sequence, have been described for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC217713



Western blot validation of overexpression lysate (Cat# [LY412871]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC223028] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).