

Product datasheet for **RC217653**

VR1 (TRPV1) (NM_080704) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VR1 (TRPV1) (NM_080704) 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:**

>RC217653 representing NM_080704
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

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 CCAGGCTGCTGTCCAGGACTCTGTGCCGCCAGCACCAGAGAAGACCCTCAGGCTCTATGATCGCAGGAG
 TATCTTTGAAGCCGTTGCTCAGAATAACTGCCAGGATCTGGAGAGCCTGCTGCTTCTCAGAGAAGAGC
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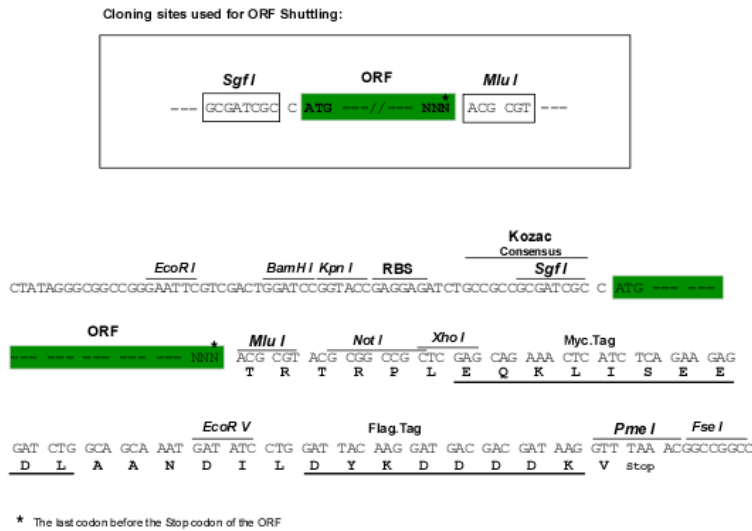
Protein Sequence: >RC217653 representing NM_080704
Red=Cloning site Green=Tags(s)

MKKWSSTDLGAAADPLQKDTCPDPLDGDPNRPPPAKPQLSTAKSRTRLFGKGDSEEAFPVDCPHEEGEL
DSCPTITVSPVITIQRPDGPPTGARLLSQDSVAASTEKTLRLYDRRSIFEAVAQNNCQDLESLLLFLQKS
KKHLTDNEFKDPETGKTCLLKAMLNLDHGQNTTIPLLLEIARQTDLSKELVNASYTDSYKGTALHIAI
ERRNMALVTLVENGADVQAAAHGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLQNSWQTADISA
RDSVGNVTLHALVEVADNTADNTKFTVSMYNEILMLGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGVL
AYILQREIQEPECRHLSRKFTWAYGPHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHMMLLVEPLN
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RGIQYFLQRRPSMKTLFVDSYSEMLFFLQSLFMLATVVL YFSHLKEYVASMVFLALGWTNMLYYTRGFQ
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QRAITILDTEKSFLLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTWNTNVGIINEDPGNCEGV
KRTL SFSLRSSRVSGRHWNFALVPLLREASARDRQSAQPPEEVYLRQFSGSLKPDAEVFKSPAASGEK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2495_c09.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_080704

ORF Size: 2517 bp

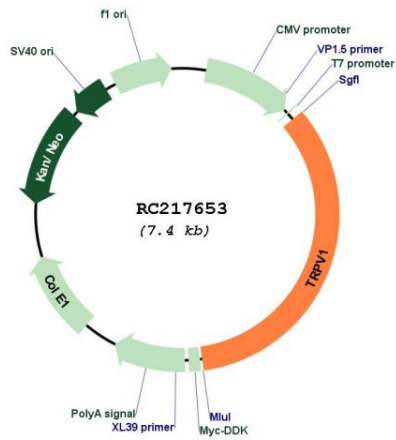
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

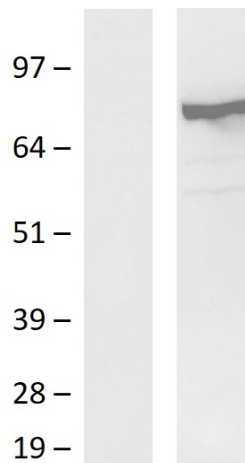
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_080704.4
RefSeq Size:	4191 bp
RefSeq ORF:	2520 bp
Locus ID:	7442
UniProt ID:	Q8NER1
Cytogenetics:	17p13.2
Protein Families:	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
MW:	95 kDa
Gene Summary:	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]

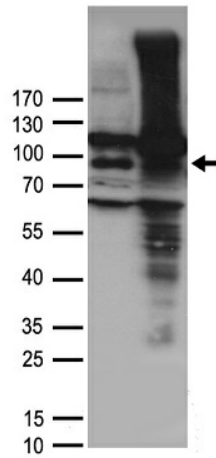
Product images:



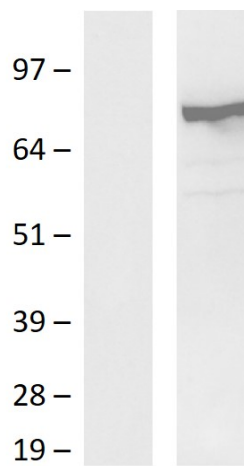
Circular map for RC217653



Western blot validation of overexpression lysate (Cat# [LY403317]) using anti-DDK antibody (Cat# [TA592569]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217653 using transfection reagent PEI.



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TRPV1 (Cat# RC217653, 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-TRPV1 antibody (Cat#[TA890016]). Positive lysates [LY403317] (100ug) and [LC403317] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403317]) using anti-DDK antibody (Cat# [TA592569]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217653 using transfection reagent PEI.