

Product datasheet for **RC202821**

VRL1 (TRPV2) (NM_016113) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VRL1 (TRPV2) (NM_016113) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VRL1
Synonyms:	VRL; VRL-1; VRL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC202821 representing NM_016113
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACCTCACCTCCAGCTCTCCAGTTTTTCAGGTTGGAGACATTAGATGGAGGCCAAGAAGATGGCTCTG
 AGGCGGACAGAGGAAAGCTGGATTTTGGGAGCGGGCTGCCTCCCATGGAGTCACAGTTCCAGGGCGAGGA
 CCGGAAATTCGCCCTCAGATAAGAGTCAACCTCAACTACCGAAAAGGAAACAGGTGCCAGTCAGCCGGAT
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 CTTCTTCTGATCTACTTAGTCTTCTTTTCGGCTTCGCTGTAGCCCTGGTGAGCCTGAGCCAGGAGGCT
 TGGCGCCCGAAGCTCCTACAGGCCCAATGCCACAGAGTCAGTGCAGCCATGGAGGGACAGGAGGACG
 AGGGCAACGGGGCCAGTACAGGGGTATCCTGGAAGCCTCCTGGAGCTCTTCAAATTCACCATCGGCAT
 GGGCGAGCTGGCCTTCCAGGAGCAGCTGCACTTCCGCGGCATGGTGTGCTGCTGCTGCTGGCCTACGTG
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 GGATGGTGCCTCTGAGGAAAATATGTGCCGTCCAGTCTCCTCCAGTCCAAC

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202821 representing NM_016113
Red=Cloning site Green=Tags(s)

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MTSPSSSPVFRLETLDGGQEDGSEADRGKLDGSGLPPMESQFQGEDRKFAPQIRVNLNRYRKTGASQPD
PNRFDRDLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCMLKAVLNKLDGVNACILPLLQ
IDRDSGNPQPLVNAQCTDDYYRGHSAHIAIEKRSLQCVKLLVENGANVHARACGRFFQKQGQTCFYFGE
LPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNLTLHALVMSDNSAENIALVTSMYDGLLQAGARL
CPTVQLEDIRNLQDLTPLKLAKEGKIEIFRHILQREFSGLSHLSRKFTWCYGPVRSVLYDLASVDSCE
ENSVLEIIAFHCKSPHRHRMVVLEPLNKLQAKWDLIPKFLLNFCNLIIYMFIFTAVAYHQPTLKKQAA
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WRPEAPTGNATESVQPMEGQEDEGNGAQYRGILEASLELFKFTIGMGELAFQEQLHFRGMVLLLLLAYV
LLTYILLLNMLIALMSETVNSVATDSWSIWKLQKATISVLEMENGYWCRKKQRAGVMLTVGTPKPDGSPDE
RWCFRVEEVNWSWEQTLPTLCEDPSGAGVPRTLENPVLASPPKEDEGDGASEENYVPVQLLQSN
    
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TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2611_e01.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_016113

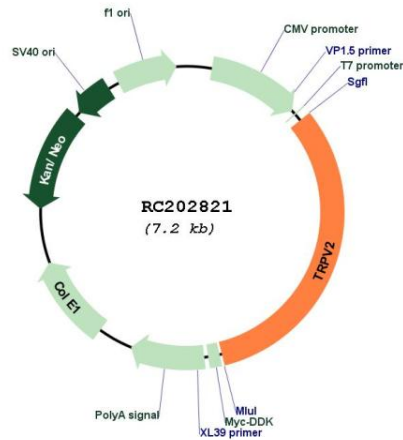
ORF Size: 2292 bp

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](#)

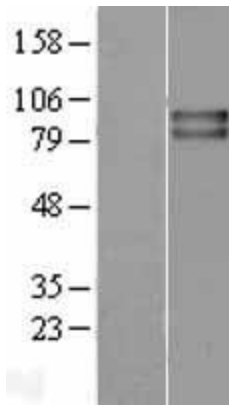
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_016113.5</u>
RefSeq Size:	2797 bp
RefSeq ORF:	2295 bp
Locus ID:	51393
UniProt ID:	<u>Q9Y5S1</u>
Cytogenetics:	17p11.2
Domains:	ANK, ion_trans
Protein Families:	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
MW:	85.8 kDa
Gene Summary:	This gene encodes an ion channel that is activated by high temperatures above 52 degrees Celsius. The protein may be involved in transduction of high-temperature heat responses in sensory ganglia. It is thought that in other tissues the channel may be activated by stimuli other than heat. [provided by RefSeq, Jul 2008]

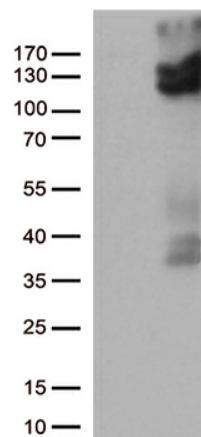
Product images:



Circular map for RC202821



Western blot validation of overexpression lysate (Cat# [LY402501]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202821 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TRPV2 (Cat# RC202821, 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-TRPV2 (Cat# [TA813002])(1:500).