

## Product datasheet for **RC230525**

### TRPV4 (NM\_001177431) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRPV4 (NM_001177431) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRPV4
Synonyms:	BCYM3; CMT2C; HMSN2C; OTRPC4; SMAL; SPSMA; SSQTL1; TRP12; VRL2; VROAC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC230525 representing NM\_001177431  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGATTCCAGCGAAGGCCCGCGCGGGGCCGGGAGGTGGCTGAGCTCCCCGGGATGAGAGTG  
 GCACCCAGGCGATGGGCGACCAATCTGCGCATGAAGTTCAGGGCGCCTCCGCAAGGGGTGCCAA  
 CCCCATCGATCTGCTGGAGTCCACCCTATATGAGTCTCGGTGGTGCCTGGGCCAAGAAAGCACCCATG  
 GACTACTGTTTGACTACGGCACCTATCGTCACCCTCCAGTGACAACAAGAGGTGGAGGAAGAAGATCA  
 TAGAGAAGCAGCCGAGAGCCCCAAAGCCCTGCCCTCAGCGCCCCCATCCTCAAAGTCTTCAACCG  
 GCCTATCCTCTTTGACATCGTGTCCCGGGCTCCACTGCTGACCTGGACGGGCTGCTCCATTCTTGCTG  
 ACCCACAAGAACGCCTAACTGATGAGGAGTTTCGAGAGCCATCTACGGGAAGACCTGCCTGCCAAGG  
 CCTTGCTGAACCTGAGCAATGGCCGCAACGACACCATCCCTGTGCTGCTGGACATCGGGAGCGCACCGG  
 CAACATGAGGGAGTTCATTAACCTCGCCCTCCGTGACATCTACTATCGAGGTGACACAGCCCTGCACATC  
 GCCATTGAGCGTGCCTGCAAACTACGTGGAACCTTCGTGGCCAGGGAGCTGATGTCCACGCCAAGG  
 CCCGTGGGCGCTTCTCCAGCCCAAGGATGAGGGGGCTACTTCTACTTTGGGGAGCTGCCCTGTGCT  
 GGCTGCCTGCACCAACCAGCCCCACATTGTCAACTACCTGACGGAGAACCCCAAGAAGGCGGACATG  
 CGGCGCCAGGACTCGCGAGGCAACACAGTGTGCATGCGCTGGTGGCATTGCTGACAACACCCGTGAGA  
 ACACCAAGTTTGTACCAAGATGTACGACCTGTGCTGCTCAAGTGTGCCCGCTCTTCCCGACAGCAA  
 CCTGGAGCCGTGCTCAACAACGACGGCCTCTCGCCCTCATGATGGCTGCCAAGACGGGCAAGATTGGG  
 ATCTTTACGACATCATCCGGCGGGAGGTGACGGATGAGGACACACGGCACCTGTCCCGCAAGTTCAAGG  
 ACTGGCCCTATGGCCAGTGTATTCCTCGCTTATGACCTCTCCTCCCTGGACAGTGTGGGGAAGAGGC  
 CTCGTGCTGGAGATCCTGGTGTACAACAGCAAGATTGAGAACCGCCACGAGATGCTGGCTGTGGAGCCC  
 ATCAATGAACTGCTGCGGACAAGTGGCGCAAGTTCGGGGCCGTCTCCTTCTACATCAACGTGGTCTCCT  
 ACCTGTGTGCCATGGTCACTTCACTCTCACCGCCTACTACCAGCCGCTGGAGGGCACACCGCCGTACCC  
 TTACCGCACACGGTGGACTACCTGCGGCTGGCTGGCGAGGTCAATACGCTCTTCACTGGGGTCTGTTT  
 TTCTTACCAACATCAAAGACTTGTTCATGAAGAAATGCCCTGGAGTGAATCTCTTCTTATTGATGGCT  
 CCTTCCAGCTGCTACTTCACTACTCTGCTGCTGGTGTGCTCAGCAGCCCTCTACCTGGCAGGGAT  
 CGAGGCCACCTGGCCGTGATGGTCTTTGCCCTGGTCTGGGCTGGATGAATGCCCTTACTTACCCGT  
 GGGCTGAAGCTGACGGGACCTATAGCATCATGATCCAGAAGATTCTCTTCAAGGACCTTTCCGATTCC  
 TGCTCGTCTACTTGTCTTTCATGATCGGCTACGCTTACGCCCTGGTCTCCCTCCTGAACCCGTGTGCCAA  
 CATGAAGGTGTGCAATGAGGACCAGACCAACTGCACAGTGCCCACTTACCCTCGTGCCGTGACAGCGAG  
 ACCTTTCAGCACCTTCTCCTGGACCTGTTAAGCTGACCATCGGCATGGGCGACCTGGAGATGCTGAGCA  
 GCACCAAGTACCCCGTGGTCTTTCATCATCTGCTGGTGGTACCTACATCCTCACCTTTGTGCTGCTCCT  
 CAACATGCTCATTGCCCTCATGGGCGAGACAGTGGGCCAGGTCTCCAAGGAGAGCAAGCACATCTGGAAG  
 CTGCAGTGGGCCACCACCATCCTGGACATTGAGCGCTCCTTCCCGTATTCTGAGGAAGGCCTTCCGCT  
 CTGGGGAGATGGTACCCTGGCAAGAGCTCGGACGGCACTCTGACCGAGGTGGTCTCAGGGTGA  
 TGAGGTGAAGTGGTCTCACTGGAACAGAACTTGGGCATCATCAACGAGGACCCGGGCAAGAATGAGACC  
 TACCAGTATTATGGCTTCTCGCATACCGTGGGCCCTCCGACGGGATCGCTGGTCTCGGTGGTACCCC  
 CGGTGGTGAAGTGAACAAGAACTCGAACCCGGACGAGGTGGTGGTGCCTCTGGACAGCATGGGGAACCC  
 CCGCTGCGATGGCCACCAGCAGGGTTACCCCGCAAGTGGAGGACTGATGACGCCCGCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

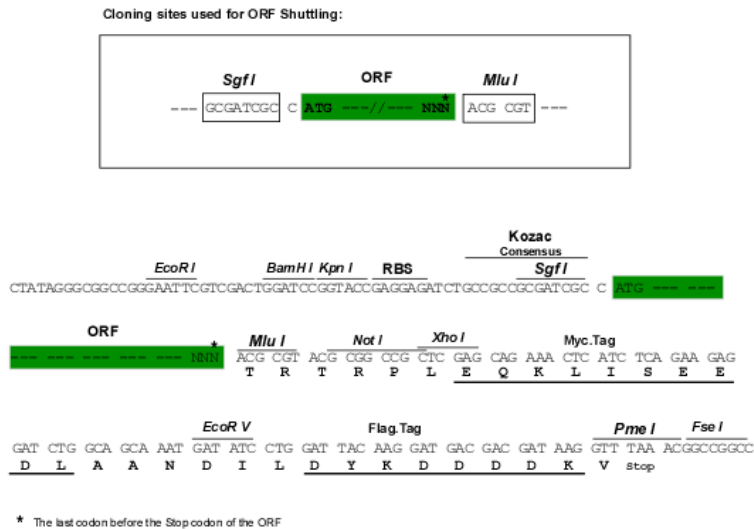
Protein Sequence: >RC230525 representing NM\_001177431  
 Red=Cloning site Green=Tags(s)

MADSSSEGPRAGPGEVAELPGDESGTPGDGRPNLRMKFQGAFRKGVNPIDLLESTLYESSVVPGPKKAPM  
 DSLFDYGTyrHHSSDNKRWRKKIIEKQPQSPKAPAPQPPPIILKVFNRPIILFDIVSRGSTADLDGLLPFLL  
 THKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIYYRGQTALHI  
 AIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHIVNYLTENPHKKADM  
 RRQDSRGNTVLHALVAIADNTRENTKFVTKMYDLLLLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIG  
 IFQHIIRREVTDTRHLSRKFKDWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEP  
 INELLRDKWRKFGAVSFYINVVSYL CAMVIFTLTAYYQPLEGTPPYRRTTVDYLRRLAGEVITLFTGVLF  
 FFTNIKDLFMKKCPGVNSLFDGSGQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLGWMNALYFTR  
 GLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLNPCANMKVCNEDQTNCTVPTYPSCRDSE  
 TFSTFLDLDFKLTIGMGDLEMLSSTKYPVVFIIILLVTYIILTFVLLLNLIALMGETVGQVSKESKHIWK  
 LQWATTILDIERSFPVFLRKAFRSGEMVTVGKSSDGTDRRWCFRVDEVNWSHWQNLGIINEDPGKNET  
 YQYYGFSHTVGRLLRRDRWSSVPRVVELNKN SNPDEVVPLDSMGNPRCDGHQGYPRKWRTDDAPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001177431

ORF Size: 2511 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\\_001177431.1](#), [NP\\_001170902.1](#)

**RefSeq ORF:** 2514 bp

**Locus ID:** 59341

**UniProt ID:** [Q9HBA0](#)

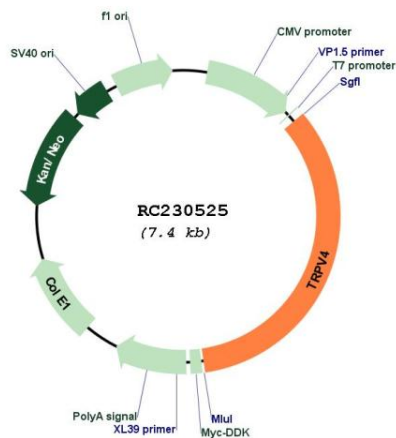
**Cytogenetics:** 12q24.11

**Protein Families:** Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane

**MW:** 95.4 kDa

**Gene Summary:** This gene encodes a member of the OSM9-like transient receptor potential channel (OTRPC) subfamily in the transient receptor potential (TRP) superfamily of ion channels. The encoded protein is a Ca<sup>2+</sup>-permeable, nonselective cation channel that is thought to be involved in the regulation of systemic osmotic pressure. Mutations in this gene are the cause of spondylometaphyseal and metatropic dysplasia and hereditary motor and sensory neuropathy type IIC. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2010]

### Product images:



Circular map for RC230525