

Product datasheet for **RG230525**

TRPV4 (NM_001177431) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRPV4 (NM_001177431) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TRPV4
Synonyms:	BCYM3; CMT2C; HMSN2C; OTRPC4; SMAL; SPSMA; SSQTL1; TRP12; VRL2; VROAC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG230525 representing NM_001177431
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGATTCCAGCGAAGGCCCGCGCGGGGCCGGGAGGTGGCTGAGCTCCCCGGGATGAGAGTG
 GCACCCAGGCGATGGGCGACCAATCTGCGCATGAAGTTCAGGGCGCCTCCGCAAGGGGTGCCCAA
 CCCCATCGATCTGCTGGAGTCCACCCTATATGAGTCTCGGTGGTGCCTGGGCCAAGAAAGCACCCATG
 GACTACTGTTTGACTACGGCACCTATCGTCACCACTCCAGTGACAACAAGAGGTGGAGGAAGAAGATCA
 TAGAGAAGCAGCCGAGAGCCCCAAAGCCCTGCCCTCAGCCGCCCCCATCCTCAAAGCTTCAACCG
 GCCTATCCTCTTTGACATCGTGTCCCGGGCTCCACTGCTGACCTGGACGGGCTGCTCCATTCTTGCTG
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 CCTTGCTGAACCTGAGCAATGGCCGCAACGACACCATCCCTGTGCTGCTGGACATCGCGGAGCGCACCGG
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 TACCAGTATTATGGCTTCTCGCATACCGTGGGCCCTCCGACGGGATCGCTGGTCTCGGTGGTACCCC
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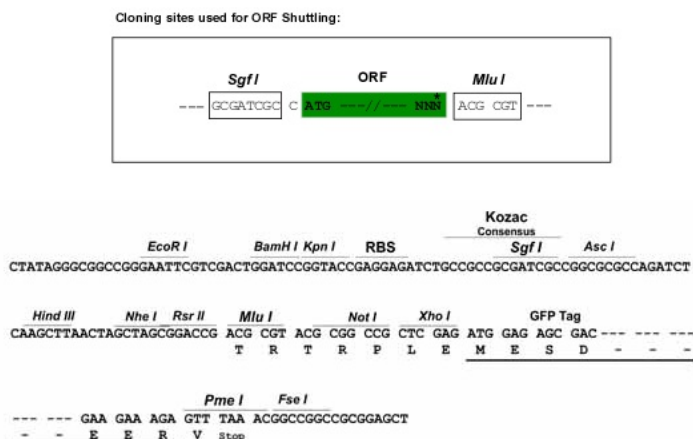
ACCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG230525 representing NM_001177431
 Red=Cloning site Green=Tags(s)

MADSSSEGPRAGPGEVAELPGDESGTPGDGRPNLRMKFQGAFRKGVNPIDLLESTLYESSVVPGPKKAPM
 DSLFDYGTyrHHSSDNKRWRKKIIEKQPQSPKAPAPQPPPIILKVFNRPIILFDIVSRGSTADLDGLLPFLL
 THKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIYRGQTALHI
 AIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHIVNYLTENPHKKADM
 RRQDSRGNTVLHALVAIADNTRENTKVFVKMYDLLLLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIG
 IFQHIIRREVTDTRHLSRKFKDWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEP
 INELLRDKWRKFGAVSFYINVVSYLCAVIFTLTAYYQPLEGTPPYRRTTVDYLRRLAGEVITLFTGVLF
 FFTNIKDLFMKKCPGVNSLFDGSGQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLGWMNALYFTR
 GLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLNPCANMKVCNEDQTNCTVPTYPSCRDSE
 TFSTFLDLDFKLTIGMGDLEMLSSTKYPVVFIIILLVYIILTFVLLLNMLIALMGETVGQVSKESKHIWK
 LQWATTILDIERSFPVFLRKAFRSGEMVTGKSSDGTDRRWCFRVDEVNWSHWNQNLGIINEDPGKNET
 YQYYGFSHTVGRLLRRDRWSSVPRVVELNKN SNPDEVVPLDSMGNPRCDGHQGYPRKWRRTDDAPL

TRTRPLE - GFP Tag - V

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 Size: 3059 bp

RefSeq ORF: 2514 bp

Locus ID: 59341

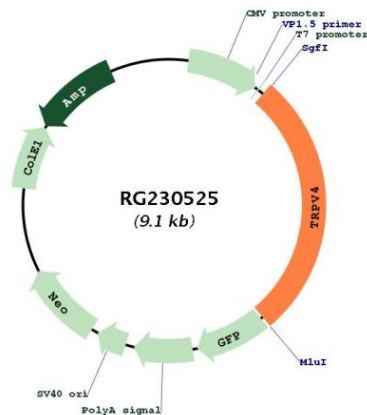
UniProt ID: [Q9HBA0](#)

Cytogenetics: 12q24.11

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

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 Ca²⁺-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 RG230525