

Product datasheet for **RG220097**

TRPV4 (NM_147204) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRPV4 (NM_147204) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RG220097 representing NM_147204
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGATTCCAGCGAAGGCCCGCGGGGGCCGGGGAGGTGGCTGAGCTCCCCGGGATGAGAGTG
 GCACCCAGGTGGGAGGCTTTTCTCTCTCCTGGCCAATCTGTTGAGGGGAGGATGGCTCCCT
 TTCGCCCTCACCGGCTGATGCCAGTCGCCCTGCTGGCCAGGCGATGGGCGACCAAACTGCGCATGAAG
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 CGGTGGTGCCTGGGCCAAGAAAGCACCCATGGACTCACTGTTTGACTACGGCACCTATCGTACCACCTC
 CAGTGACAACAAGAGGTGGAGGAAGAAGATCATAGAGAAGCAGCCGAGAGCCCCAAAGCCCTGCCCT
 CAGCCGCCCCCATCCTCAAAGTCTTCAACCGCCTATCCTCTTTGACATCGTGTCCGGGGCTCCACTG
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 CGTGGCCAGGGAGCTGATGTCCACGCCAGGCCGTTGGGCGCTTCTTCCAGCCCAAGGATGAGGGGGC
 TACTTCTACTTTGGGAGCTGCCCTGTGCTGGCTGCCTGCACCAACGACCCACATTGTCAACTACC
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 GCTGGTGGCCATTGCTGACAACCCGTGAGAACAAGTTGTTACCAAGATGACGACCTGTGCTG
 CTCAAGTGTGCCGCCTTCCCCGACAGCAACCTGGAGGCCGTGCTCAACAACGACGGCCTCTGCCCC
 TCATGATGGCTGCCAAGACGGGCAAGATTGGGAACCGCCACGAGATGCTGGCTGTGGACCCATCAATGA
 ACTGCTGCGGGACAAGTGGCGCAAGTTCGGGGCGTCTCCTTCTACATCAACGTGGTCTCCTACCTGTGT
 GCCATGGTCATCTTCACTCTCACCGCTACTACCAGCCGCTGGAGGGCACACCGCCGTACCTTACC
 CCACGGTGGACTACCTGCGGCTGGCTGGCGAGGTATTACGCTCTTCACTGGGGTCTGTTCTTCTTAC
 CAACATCAAAGACTTGTTCATGAAGAAATGCCCTGGAGTGAATTCTCTTCAATTGATGGCTCCTCCAG
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 ACCTGGCCGTGATGGTCTTGGCCCTGGTCTGGGCTGGATGAATGCCCTTACTTCAACCGTGGGCTGAA
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 TCATTGCCCTCATGGGCGAGACAGTGGGCCAGGTCTCAAAGGAGAGCAAGCACATCTGGAAGCTGCAGTG
 GGCCACCACCATCCTGGACATTGAGCGCTCCTTCCCCGATTCTGAGGAAGGCCCTCCGCTCTGGGGAG
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 TTATGGCTTCTCGCATACCGTGGGCCCTCCGACGGATCGCTGGTCTCCTCGGTGATACCCCGCTGGTG
 GAACTGAACAAGAACTCGAACCAGGACAGGTGGTGGTGCCTCTGGACAGCATGGGGAACCCCGCTGCG
 ATGGCCACCAGCAGGTTACCCCGCAAGTGGAGGACTGATGACGCCCGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG220097 representing NM_147204
 Red=Cloning site Green=Tags(s)

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MADSSEGPRAGPGEVAELPGDESGTPGGEAFPLSSLANLFEGEDGSLSPSPADASRPAGPGDGRPNLRMK
FQGAFRKGVPNPIDLLESTLYESSVVPGPKKAPMDSLFDYGYRHHSSDNKRWRKKIEKQPQSPKAPAP
QPPPILKVFNRPIILFDIVSRGSTADLDGLLPFLPTHKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTI
PVLLDIAERTGNMREFINSPFRDIYYRGQTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGG
YFYFGELPLSLAACTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFFVTKMYDLLL
LKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIGNRHEMLAVEPINELLRDKWRKFGAVSFYINVVSYLC
AMVIFTLTAYYQPLEGTPPYRTTVDYLRAGEVITLFTGVLFFFTNIKDLFMKKCPGVNSLFIDGSFQ
LLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLGWMNALYFTRGLKLTGTYSIMIQLFKDLFRLLV
YLLFMIGYASALVLLNPCANMKVCNEDQTNCTVPTYPSCRDSETFSTFLDLFKLTIGMGDLEMLSSTK
YPVVFIIILLVTYIILTFVLLNMLIALMGETVGQVSKESKHIWKLQWATTILDIERSFPVFLRKAFRSGE
MVTVGKSSDGTDRRWCFRVDEVNWSHWNQNLGIINEDPGKNETYQYYGFSHTVGRLLRRDRWSSVPRVV
ELNKNSNPDEVVPLDSMGNPRCDGHQGYPRKWRTDDAPL
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_147204

ORF Size: 2433 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_147204.1](#), [NP_671737.1](#)

RefSeq Size: 3057 bp

RefSeq ORF: 2436 bp

Locus ID: 59341

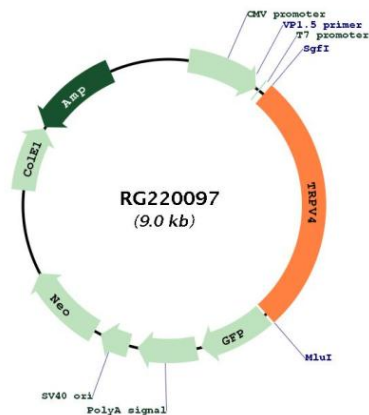
UniProt ID: [Q9HBA0](#)

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 RG220097