

Product datasheet for **RG227015**

TPCN1 (NM_001143819) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TPCN1 (NM_001143819) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TPCN1
Synonyms:	TPC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG227015 representing NM_001143819
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGTCTTGCTACATTGCCAGGCTGGTCTTGAAGTCTAGGCTCAAGCAGTTCTCCACCTTGACCT
 CCCAAAGCGCTGAGATTACAGAAGATGCCTCTAATGGAGGAGTTTCTGAGCAGCACCCCTGGCCAGTGG
 CTTTGAAAGGGAGCTCAAACCAGAGACTATTTCAAGCCCTGGATATCATATCCTGAGGGCCACAGGAGAA
 GAGAACATGGCTGTGAGTTGGATGACGACGTGCCGCTCATCCTGACCTTGGATGAGGGTGGCAGTGCCC
 CACTGGCTCCCTCCAACGGCCTGGGCCAAGAAGAGCTACCTAGCAAAAATGGCGGCAGCTATGCCATCCA
 CGACTCCCAGGCCCCAGTCTCAGCTCTGGGGTGGAGTTCCCCCTCCAGCCCCGCACACAACCTGGGAG
 ATGAATTACCAAGAGGCAGCAATCTACCTCCAGGAAGGCGAGAACAACGACAAGTTCTTCAACCCACCCCA
 AGGATGCCAAGGCGCTGGCGCCCTACCTCTTGCACACAATCACCTCTTCTACCTGATGGAGCTGGCCAC
 GGCCCTGCTGCTGCTGCTCTCCCTGTGCGAGGCCCGCCGTCCTCCGCACTCCGGCTTGGCATCTAT
 GTCACAGCCACCCCTGGAGCTGTTTGGCCCTGATGGTGGTAGTGTGTTGAACTCTGCATGAAGTTACGCTGGC
 TGGGCCTCCACACCTTCACTCCGGCACAAGCGGACCATGGTCAAGACCTCGGTGCTGGTGGTGCAGTTTGT
 CGAGGCCATCGTGGTGTGGTACGGCAGATGTCCCATGTGCGGGTGACCCGAGCACTGCGCTGCATTTTC
 CTGGTGGACTGTCCGATTGCGGTGGCGTCCGGCGCAACCTGCGGCAGATCTTCCAGTCCCTGCCGCCCT
 TCATGGACATCCTCCTGCTGCTGCTGTTCTTATGATCATCTTTGCCATCCTCGGTTTCTACTTGTTC
 CCCTAACCCCTTACAGACCCTACTTACGACCCCTGGAGAACAGCATCGTCAGTCTGTTTGCCTTCTGACC
 ACAGCCAATTTCCAGATGTGATGATGCCCTCTACTCCCGGAACCCCTGGTCTGCGTCTTCTTCAATCG
 TGTACCTCTCCATCGAGCTGATTTTATCATGAACCTGCTTCTGGCTGTGGTGTTCGACACCTTCAATGA
 CATTGAGAAACGCAAGTTCAAGTCTTGTCTACTGCACAAGCGAACCCTATCCAGCATGCCCTACCGCTG
 CTCATCAGCCAGAGGAGGCTGCGGCATCTCCTACAGGCAGTTTGAAGGCCCTATGCGCTTCTACAAGC
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 GAAAGGTGGAACTTCTTCTCAAGCACGTGCCCTGGAGTTACCTCGTCTTCTAACTATCTATGGGGT
 GAGCTGTTCTGAAGTTGCCGGCTGGCCCTGTGGAGTACTTGTCTTCCGGATGGAACCTGTTTGGACT
 TCTCCGTGACAGTGTTCGCCTTCTGGGACTGCTGGCGCTGGCCCTCAACATGGAGCCCTTCTATTTTCA
 CGTGGTCTGCGCCCCCTCCAGCTGCTGAGGTTGTTAAGTTGAAGGAGCGCTACCGCAACGTGCTGGAC
 ACCATGTTGAGCTGCTGCCCGGATGGCCAGCCTGGGCCTCACCTGCTCATCTTTACTACTCCTTTCG
 CCATCGTGGGCATGGAGTTCTTCTGCGGGATCGTCTTCCCAACTGCTGCAACACGAGTACAGTGGCAGA
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 AGCCTGAAGATGTACCAGGAGGAGATCCAGGAGTGGATGAGGAGCATGCCAGGGAGCAAGAGCAGCAGC
 GACAACTCAGCAGCAGTGCAGCCCCGCCGCCAGCAGCCCCAGGCAGCCGCCAGCGCTCCAGACCGT
 TACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG227015 representing NM_001143819
 Red=Cloning site Green=Tags(s)

MESCYIAQAGLELLGSSSSPTLTSQSAEITEDASNGGVSEQHPWPSGFERELKPETISSPGYHILRATGE
 ENMAVSLDDDVLILTLDEGGSAPLAPSNGLGQEELPSKNGGSYAIHDSQAPSLSSGESSPSSPAHNWE
 MNYQEAAYLQEGENNDKFFTHPKDAKALAAAYLFAHNHLFYLMEALATALLLLLLSLCEAPAVPALRLGIY
 VHATLELFALMVVVFELCMKLRWLGHTFIRHKRTMVKTSVLVQFVEAIVVLVRQMSHVRVTRALRCIF
 LVDCRYCGVRRNLRQIFQSLPPFMDILLLLFFMIIFAILGFYLFSPNPSDPYFSTLENSIVSLFVLLT
 TANFPDVMPPSYSRNPWSCVFFIVYLSIELYFIMNLLLAVVFDTFNDIEKRKFKSLLLHKRTAIQHAYRL
 LISQRRPAGISYRQFEGLMRFYKPRMSARERYLTFKALNQNTPLLCLKDFYDIYEVAALKWKAKKNREH
 WFDELPRTALLIFKGINILVKSQAFQYFMYLVAVNGVWILVETFMLKGGNFFSKHVPWSYLVFLTIYGV
 ELFLKAVAGLPVEYLSSGNLFDVSVTVFAFLGLLALALNMEPFYFIVLRLQLLRLFKLKERYRNVLD
 TMFELLPRMASLGLTLLIFYYSFAIVGMEFFCGIVFPNCCNTSTVADAYRWRNHTVGNRTVVEEGYYLNLN
 NFDNINLSFVTLFELTVNNWYIIMEGVTSTQSHWSRLYFMTFYIVTMVMTIIVAFILEAFVFRMNYSR
 KNQDSEVDGGITLKEISKEELVAVLELYREARGASSDVTRLLETLSQMERYQQHSMVFLGRRSRTKSDL
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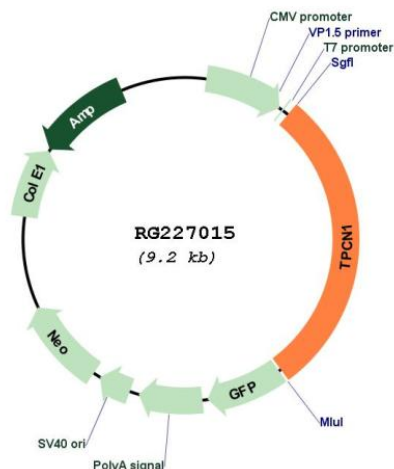
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001143819

ORF Size: 2664 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_001143819.3](#)

RefSeq Size: 5472 bp

RefSeq ORF: 2667 bp

Locus ID: 53373

UniProt ID: [Q9ULQ1](#)

Cytogenetics: 12q24.13

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Gene Summary: Voltage-gated Ca(2+) and Na+ channels have 4 homologous domains, each containing 6 transmembrane segments, S1 to S6. TPCN1 is similar to these channels, but it has only 2 domains containing S1 to S6 (Ishibashi et al., 2000 [PubMed 10753632]).[supplied by OMIM, Mar 2008]