

## Product datasheet for **RC239469**

### TPCN1 (NM\_001301214) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TPCN1 (NM_001301214) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TPCN1
Synonyms:	TPC1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>RC239469 representing NM\_001301214  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAATTACCAAGAGGCAGCAATCTACCTCCAGGAAGGCGAGAACAACGACAAGTCTTCCACCCACCCCA  
 AGGATGCCAAGGCGCTGGCGGCCTACCTCTTGCACACAATCACCTCTTCTACCTGATGGAGCTGGCCAC  
 GGCCCTGCTGCTGCTGCTCTCCCTGTGCGAGGCCCGCCGTCGCCGCACTCCGGCTTGGCATCTAT  
 GTCCACGCCACCCTGGAGCTGTTTGGCCTGATGGTGGTAGTGTGTTGAACTCTGCATGAAGTTACGCTGGC  
 TGGGCCTCCACACCTTCCCGGCACAAGCGGACCATGGTCAAGACCTCGGTGCTGGTGGTGCAGTTTGT  
 CGAGGCCATCGTGGTGTGGTACGGCAGATGTCCCATGTGCGGGTGACCCGAGCACTGCGCTGCATTTTC  
 CTGGTGGACTGTCGGTATTGCGGTGGCGTCCGGCGCAACCTGCGGCAGATCTCCAGTCCCTGCCGCCCT  
 TCATGGACATCCTCTGCTGCTGCTGTTCTTCATGATCATCTTGGCCATCCTCGGTTTCTACTTGTTC  
 CCTAACCTTCCAGACCCCTACTTCAGCACCTGGAGAACAGCATCGTCAGTCTGTTTGGCTTCTGACC  
 ACAGCCAATTTCCAGATGTGATGATGCCCTCCTACTCCCGGAACCCCTGGTCTCGCTTCTTTCATCG  
 TGTACCTCTCCATCGAGCTGTATTTTCATCATGAACCTGCTTCTGGCTGTGGTGTTCGACACCTTCAATGA  
 CATTGAGAAACGCAAGTTCAAGTCTTGTACTGCACAAGCGAACCCTATCCAGCATGCCTACCGCCTG  
 CTCATCAGCCAGAGGAGGCTGCCGGCATCTCCTACAGGCAGTTTGAAGGCCCTATGCGCTTCTACAAGC  
 CCCGGATGAGTGCCAGGGAGCGCTATCTTACCTTCAAGGCCCTGAATCAGAACACACACCCCTGCTCAG  
 CCTAAAGGACTTTTACGATATCTACGAAGTTGCTGCTTGAAGTGAAGGCCAAGAAAAACAGAGAGCAC  
 TGGTTTGGATGAGCTTCCAGGACGGCGCTCCTCATCTTCAAAGGTATTAATATCCTTGTGAAGTCCAAGG  
 CTTCCAGTATTTTCATGTACTTGGTGGTGGCAGTCAACGGGGTCTGGATCCTCGTGGAGACATTTATGCT  
 GAAAGGTGGAACTTCTTCTCCAAGCACGTGCCCTGGAGTTACCTCGTCTTCTAACTATCTATGGGGTG  
 GAGCTGTTCTGAAGTTGCCGGCTGGGCCCTGTGGAGTACTTGTCTTCCGGATGGAACCTGTTTGGACT  
 TCTCCGTGACAGTGTTCCGCTTCTGGGACTGCTGGCGCTGGCCCTCAACATGGAGCCCTTCTATTTTCAT  
 CGTGGTCTGCGCCCCCTCCAGCTGCTGAGGTTGTTAAGTTGAAGGAGCGCTACCGCAACGTGCTGGAC  
 ACCATGTTGAGCTGCTGCCCGGATGGCCAGCCTGGGCCTCACCTGCTCATCTTTACTACTCCTTCCG  
 CCATCGTGGGCATGGAGTTCTTCTGCGGGATCGTCTTCCCAACTGCTGCAACACGAGTACAGTGGCAGA  
 TGCTACCGCTGGCGCAACCACACCGTGGGCAACAGGACCGTGGTGGAGGAAGGCTACTATTATCTCAAT  
 AATTTTGACAACATCCTCAACAGCTTTGTGACCCTGTTTGGAGCTCACAGTTGTCAACAACGGTACATCA  
 TCATGGAAGGCGTCACCTCTCAGACCTCCCACTGGAGCCGCTCTACTTCATGACCTTTTACATTGTGAC  
 CATGGTGGTGTGACGATCATTGTGCCTTTATCTCGAGGCCTTCGTCTTCCGAATGAACTACAGCCGC  
 AAGAACCAGGACTCGGAAGTTGATGGTGGCATCACCTTGAGAAGGAAATCTCCAAGAAGAGCTGGTTG  
 CCGTCTGGAGCTTACCGGGAGGCACGGGGGCTCCTCGGATGTACCAGGCTGCTGGAGACCTCTC  
 CCAGATGGAGAGATACCAGCAACATTCATGGTGTCTTGGGACGGCGATCAAGGACCAAGAGCGACCTG  
 AGCCTGAAGATGTACCAGGAGGATCCAGGAGTGGATGAGGAGCATGCCAGGGAGCAAGAGCAGCAGC  
 GACAACCTCAGCAGTGCAGCCCCCGCCAGCAGCCCCAGGACCGCCAGCGCTCCAGACCGT  
 TACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239469 representing NM\_001301214  
 Red=Cloning site Green=Tags(s)

MNYQEAAIYLQEGENNDKFFTHPKDAKALAAFLFAHNHLFYLMELATALLLLLLCLCEAPAVPALRLGIY  
 VHATLELFAIMVVVVELCMKLRWGLHTFIRHKRTMVKTSVLVVQFVEAIVVLVRQMSHVRVTRALRCIF  
 LVDCRYCGGVRRLNRQIFQSLPPFMDILLLLLFFMIIFAILGFYLFSPNPSDPYFSTLENSIVSLFVLLT  
 TANFPDVMMPYSYRNPNWSCVFFIVYLSIELYFIMNLLLAVVFDTFNDIEKRKFKSLLLHKRTAIQHAYRL  
 LISQRRPAGISYRQFEGLMRFYKPRMSARERYLTFKALNQNTPLLCLKDFYDIYEVAALKWKAKKNREH  
 WFDELPRTALLIFKGINILVKSQAFQYFMYLVAVNGVWILVETFMLKGGNFFSKHVPWSYLVFLTIYGV  
 ELFLKAVAGLPVEYLSGGWNLDFSVTVFAFLGLLALALNMEPFYFIVVLRPLQLLRLFLKERYRNVLD  
 TMFELLPRMASLGLTLLIFYSSFAIVGMEFFCGIVFPNCNTSTVADAYRWRNHTVGNRTVVEEGYYLNLN  
 NFDNILNSFVTLFELTVVNNWYIIMEGVTSTSHWSRLYFMTFYIVTMVMTIIVAFILEAFVFRMNYSR  
 KNQDSEVDGGITLKEISKEELVAVLELYREARGASSDVTRLLETLSQMERYQQHSMVFLGRRSRTKSDL  
 SLKMYQEEIQEWYEEHAREEQQRQLSSAAPAAQPPGSRQRSQTVT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

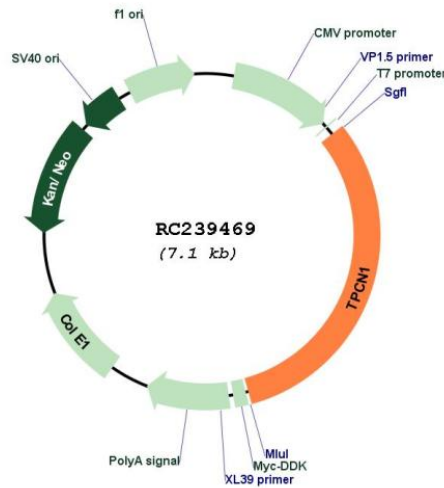
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_001301214

ORF Size: 2244 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\\_001301214.1](#), [NP\\_001288143.1](#)

RefSeq Size: 5071 bp

RefSeq ORF: 2247 bp

Locus ID: 53373

**UniProt ID:** [Q9ULQ1](#)

**Cytogenetics:** 12q24.13

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

**MW:** 87.8 kDa

**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]