

## Product datasheet for **RG216277**

### **PTOP (ACD) (NM\_022914) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PTOP (ACD) (NM_022914) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTOP
Synonyms:	PIP1; PTOP; TINT1; TPP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG216277 representing NM\_022914  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCCTGGCCGCTGTGACAGTACGCGCGGATGAGAGTAAACGGGCCAGCATCCCCTGCACCAGCGGGT  
 GGACCAGCGGGAGTCTGCACACAGGCCCGGAGCAGGACGCCCTCGTGCGCAGGCCGCGGGGTGTACGTGG  
 GCGGGGCTCCTCCTCCGGCCCCGCCAGCAAGGAGTTCCTCTCCGAGGAAAGCGGGGCTGGGCG  
 CCCGCGGAAACCGGGCCCGTTGCATCCGCTGGGTGTAGCCGTGGGATGGCAGGTTCCGGGAGGCTGG  
 TCCTACGGCCCTGGATTCGGGAGCTGATTCTGGGGTACAGACACCCTCCAGTCCACGAGCCGGGACGT  
 GCTTGAGTACTACAGGACGCCGAGGCCGCGGTGCGGGGCCATCCCACGCCCTGATACGTCGACGTC  
 GGGGCCACGCTGCTTGTGTGACGGGACCCACAGTGTCCGATGCCTGGTACGCGGGAGGCCCTGGACA  
 CCTCGGACTGGGAGGAGAAGGAGTTCGGCTTCCGCGGGACAGAGGCCGGCTGCTGCTGCAGGACTG  
 CGGGTTCATGTCCAGGTCGCTGAGGGCGCGCCCGCAGAGTCTATCTCCAGGTGGACCGCTTCAGC  
 CTGCTGCCACGGAGCAGCCCCGGCTACGGGTGCCTGGTTGCAACCAAGACTTAGATGTTCAAAAAAGC  
 TCTATGACTGCCTTGAGGAGCACCTTTCAGAGTCCACCTCGTCCAATGCAGGCCATCACTGTCCCAGCT  
 TCTGGATGAAATGCGGGAGGACCAGGAGCATCAGGGGGCACTCGTGTGCCTGGTGAAAGCTGCCTGACA  
 CTGGAGGGCCCTTGACACGACCCCCCTGTACCCACTGGGCTGCCTCACGATGCAAGGCCACGGGAGAAG  
 CTGTGTACACTGTCCCAGCTCAATGCTGTGCATCTCTGAGAATGACCAGCTAATTCTGAGCTCTTAGG  
 CCCCTGTACAGGACACAGGGCCCTGAGCTGCCCCACCAGACCCGGCTTCGACGACCTATCTGACCC  
 CTCATAGCCTCTCCTCCTCCTCACCCAGTTCCTCAGGAACCCCGGCTTACCCGGCCACATGTCATCCG  
 AGGAAAGTGGTACCAGCATCAGCCTTCTGCCTGCCCTGTCTTGGCTGCTCCAGACCCAGGCGAGGAAG  
 CAGCTCCCAGCCCTCACCAGCCATCTGCTCAGCCCTGCCACCCTGACCCCAAGTCCCCACACGCCAGC  
 CGTACCCCGAGCTCCCCACTCCAGAGTGCACCTCCAGTCTCTCACCCCGTAGCCATGTCCCAGTCCAC  
 ACCAGGCTCTTGTGACCAGGCCAGAAACCTAGCCTGGAGTCAAGGAGTTTGTAGGGTTGCCCTGCAA  
 GAATCGGCCCGCTTTTCCAGGACCGGAGCTACCAGGGGAGCCAGGAGCCCTGCTGTCTGGAAACCC  
 CCAAAGAGGCATCGTGATGGTTCTGCCTCCAGTATGAGTATGAGCCACCCTGCACGTCCCTCTGTGCTC  
 GGGTCAAAGCTGCCAGGCTTCTCCCCAGCTCATGGCTGGGCTTGCACTTTCTGATGGATGCACAGCC  
 AGGTCTGAGCCAACCTCCGATG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG216277 representing NM\_022914  
 Red=Cloning site Green=Tags(s)

MPGRCQSDAAMRVNGPASRAPAGWTSGLHTGPRAGRPRPRAQARGVRRGRLLRPRPAKELPLPRKGGAWA  
 PAGNPGPLHPLGVAVGMAGSGRLVLRPWIRELILGSETPSSPRAGQLLEVLQDAEAAVAGPSHAPDTSV  
 GATLLVSDGTHSVRCLVTREALDTSWEEKFEGFRGTEGRLLLLQDCGVHVQVAEGGAPAEFYLVDRFS  
 LLPTEQPRLRVPGCNQDLVQKKLYDCLLEHLSESTSSNAGLSLSQLLDEMREDQEHQGLVCLAESCLT  
 LEGPCTAPPVTHWAASRCKATGEAVYTPSSMLCISENDQLILSSLGPCQRTQGPELPPDPALQDLSLT  
 LIASPPSSPSSGTPALPGHMSSEESGTSISLLPALSLAAPDPGQRSSSQPSAICSAPATLTPRSPHAS  
 RTPSSPLQSCPSLSPRSHVPSPHQALVTRPQKPSLEFKEFVGLPCKNRPPFPRTGATRGAQEPCSVWEP  
 PKRHRDGSADFQYEYPPCTSLCARVQAARLPQLMAWALHFLMDAQPGESEPTM

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_022914

**ORF Size:** 1632 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\\_022914.1](#), [NP\\_075065.1](#)

**RefSeq Size:** 2034 bp

**RefSeq ORF:** 1368 bp

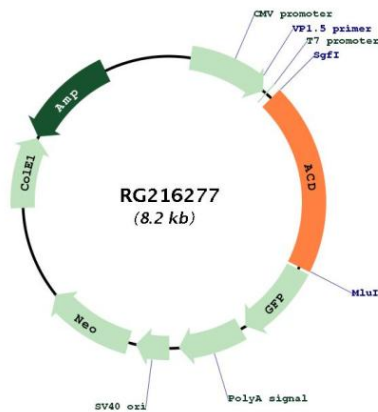
**Locus ID:** 65057

**UniProt ID:** [Q96AP0](#)

**Cytogenetics:** 16q22.1

**Gene Summary:** This gene encodes a protein that is involved in telomere function. This protein is one of six core proteins in the telosome/shelterin telomeric complex, which functions to maintain telomere length and to protect telomere ends. Through its interaction with other components, this protein plays a key role in the assembly and stabilization of this complex, and it mediates the access of telomerase to the telomere. Multiple transcript variants encoding different isoforms have been found for this gene. This gene, which is also referred to as TPP1, is distinct from the unrelated TPP1 gene on chromosome 11, which encodes tripeptidyl-peptidase I. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG216277