

## Product datasheet for **RC212674**

### **PTOP (ACD) (NM\_001082487) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PTOP (ACD) (NM_001082487) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTOP
Synonyms:	PIP1; PTOP; TINT1; TPP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC212674 representing NM\_001082487  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCCTGGCCGCTGTGACAGTACGCCGCGATGAGAGTAAACGGGCCAGCATCCCCTGCACCAGCGGGT  
 GGACCAGCGGGAGTCTGCACACAGGCCCCGAGCAGGACGCCCTCGTGCGCAGGCCGCGGGTGTACGTGG  
 GCGGGGCTCCTCCTCCGGCCCCGCCAGCAAGGAGTTCCTCTCCGAGGAAAGCGGGGCTGGGCG  
 CCCGCGGAAACCGGGCCGTTGCATCCGCTGGGTGTAGCCGTGGGATGGCAGGTTCCGGGAGGCTGG  
 TCCTACGGCCCTGGATTCGGGAGCTGATTCTGGGGTACAGACACCCTCCAGTCCACGAGCCGGGACGT  
 GCTTGAGGACGCCGAGGCCGCGGTGCGGGGCCATCCCACGCCCTGATACGTCCGACGTGCGGGCCACG  
 CTGCTTGTGTCTGACGGGACCCACAGTGTCCGATGCCTGGTGACGCGGGAGGCCCTGGACACCTCGGACT  
 GGGAGGAGAAGGAGTTCGGCTTCCGCGGACAGAGGGCCGGCTGCTGCTGCTGCAGGACTCGGGGTTCA  
 TGTCCAGGTCGCTGAGGGCGGCGGCCCGCAGAGTTCTATCTCCAGGTGGACCGTTCAGCTGCTGCC  
 ACGGAGACGCCCGGCTACGGGTGCCTGGTTGCAACCAAGACTTAGATGTTCCAGAAAAAGCTCTATGACT  
 GCCTTGAGGAGCACCTTTCAGAGTCCACCTCGTCCAATGCAGGCCTATCACTGTCCCAGCTTCTGGATGA  
 AATGCGGGAGGACCAGGAGCATCAGGGGCACTCGTGTGCCTGGCTGAAAGCTGCCTGACACTGGAGGGC  
 CCTTGACAGCACCCCTGTCAACCCACTGGGCTGCCTCAGATGCAAGGCCACGGGAGAAGCTGTGTACA  
 CTGTCCCAGCTCAATGTGTGCATCTCTGAGAATGACCAGCTAATTCTGAGCTCTCTAGGCCCTGTCA  
 GAGGACACAGGGCCCTGAGCTGCCCCACCAGACCCGGCTCTGCAGGACCTATCTCTGACCTCATAGCC  
 TCTCCTCTTCTCACCCAGTTCCTCAGGAACCCCGGCTTACCCGGCCACATGTATCCGAGGAAAGTG  
 GTACCAGCATCAGCCTTCTGCCTGCCCTGTCTGGCTGCTCCAGACCCAGGGCAGAGAGCAGCATGCCA  
 GCCCTCACAGCCATCTGCTCAGCCCTGCCACCTGACCCCAAGTCCCAACACGAGCCGATCCCC  
 AGCTCCCACTCCAGAGCTGCACTCCAGTCTCTCACCCGATGCCATGTCCCAAGTCCACACCAGGCTC  
 TTGTGACCAGGCCCCAGAACTAGCCTGGAGTCAAGGAGTTTGTAGGGTTGCCCTGCAAGAATCGGCC  
 GCCTTTTCCAGGACCGGAGCTACCAGGGGAGCCAGGAGCCCTGCTGTCTGTGATGAGTATGAGCCA  
 CCCTGCACGTCCCTCTGTGCTCGGGTCCAAGCTGTGAGGCTTCTCCCAAGCTCATGGCTGGGCTTGC  
 ACTTCTGATGGATGCACAGCCAGGCTGTGAGCCAACCTCCGATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC212674 representing NM\_001082487  
 Red=Cloning site Green=Tags(s)

MPGRCQSDAAMRVNGPASRAPAGWTSGLHTGPRAGRPRPRAQARGVRRGRLLRPRPAKELPLPRKGGAWA  
 PAGNPGPLHPLGVAVGMAGSGRLVLRPWIRELILGSETPSSPRAGQLLEDAEAAVAGPSHAPDTSVVGAT  
 LLYSDGTHSVRCLVTREALDTSWEEKEFGFRGTEGRLLLLQDCGVHVQVAEGGAPAEFYLVQVDRFSLLP  
 TEQPRLRVPGCNQDLVDVQKLYDCLEEHLSESTSSNAGLSLQLLDEMREDQEHQALVCLAESCLTLEG  
 PCTAPPVTHWAASRKATGEAVYVTPSSMLCISENDQLILSSLGPCQRTQGPELPPDPALQDLSLTLIA  
 SPPSSPSSGTPALPGHMSSEESGTSISLLPALSLAAPDPGQRSSSQPSAICSAPATLTPRSPHASRTP  
 SSPLQSCTPSLSPRSHVPSPHQALVTRPQKPSLEFKEFVGLPCKNRPPFPRTGATRGAQEPCSVWYIEYEP  
 PCTSLCARVQAVRLPPQLMAWALHFLMDAQPGSEPTM

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8065\\_f02.zip](https://cdn.origene.com/chromatograms/mk8065_f02.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001082487

ORF Size: 1584 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

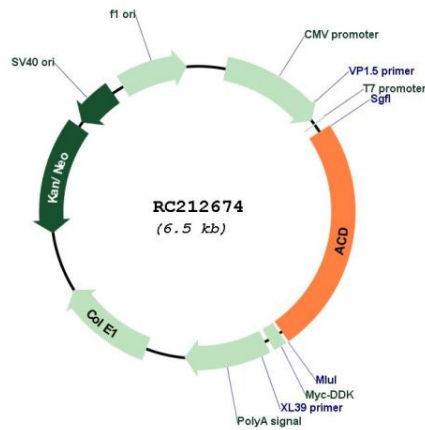
- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_001082487.1](#), [NP\\_001075956.1](#)

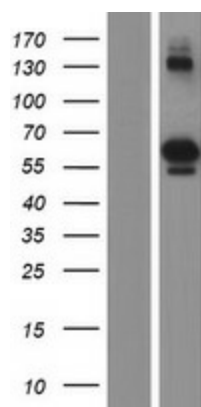
RefSeq Size: 2047 bp  
 RefSeq ORF: 1587 bp  
 Locus ID: 65057  
 UniProt ID: [Q96AP0](#)  
 Cytogenetics: 16q22.1  
 MW: 55.7 kDa

**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 RC212674



Western blot validation of overexpression lysate (Cat# [LY421184]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212674 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).