

Product datasheet for **RC216277**

PTOP (ACD) (NM_022914) Human Tagged ORF Clone

Product data:

| | |
|----------------------------------|-------------------------|
| Product Type: | Expression Plasmids |
| Tag: | Myc-DDK |
| Symbol: | PTOP |
| Synonyms: | PIP1; PTOP; TINT1; TPPI |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence: >RC216277 representing NM_022914
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGCCTGGCCGCTGTCAGAGTGACGCCGATGAGAGTAAACGGGCCAGCATCCCGTGCACCAGCGGGT
 GGACCAGCGGGAGTCTGCACACAGGCCCGAGCAGGACGCCCTCGTGCAGGCGCGGGGTGTACGTGG
 GCGGGGCTCCTCCTCCGGCCCGCCAGCGAAGGAGCTTCTCTTCCGAGGAAAGCGGGGCTGGGCG
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 GCTTGAGGTACTACAGGACGCGAGGCCGCGGTGCGGGGCCATCCACGCCCTGATACGTCCGACGTC
 GGGGCCACGCTGCTGTGTCTGACGGGACCCAGTGTCCGATGCCTGGTACGCGGGAGGCCCTGGACA
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 GGGTCCAAGCTGCCAGGCTTCTCCAGCTCATGGCCTGGCCTTGCACCTTCTGATGGATGCACAGCC
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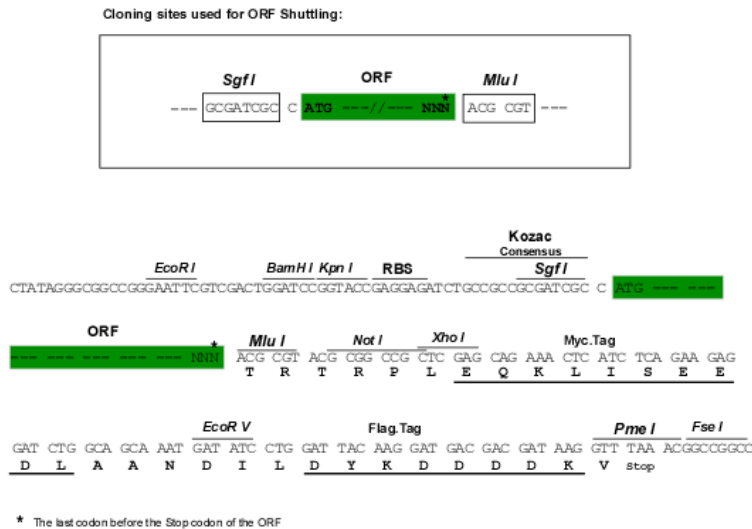
Protein Sequence: >RC216277 representing NM_022914
 Red=Cloning site Green=Tags(s)

MPGRCQSDAAMRVNGPASRAPAGWTSGLHTGPRAGRPRQAARGVVRGRLLLRPRPAKELPLPRKGGAWA
 PAGNPGPLHPLGVAVMAGSGRLVLRPWIRELILGSETPSSPRAGQLLEVLQDAEAAVAGPSHAPDTSV
 GATLLVSDGTHSVRCLVTREALDTSWEEKKEFGFRGTEGRLLLLQDCGVHVQVAEGGAPAEFYLVQDRFS
 LLPTEQPRLRVPGCNQDLDVQKKLYDCLEHLSESTSSNAGLSLSQLLDEMREDQEHQALVCLAESCLT
 LEGPCTAPPVTHWAASRCKATGEAVYTPSSMLCISENDQLILSSLGPCQRTQGPPELPPDPALQDLSLT
 LIASPPSSPSSGTPALPGHMSSEESGTSISLLPALSLAAPDPGQRSSQPSAICSAPATLTPRSPHAS
 RTPSSPLQSCTPSLSPRSHVPSPHQALVTRPQKPSLEFKFVGLPCKNRPPFPRTGATRGAQEPSCSVWEP
 PKRHRDGSFAFYEPCTSLCARVQAARLPQLMAWALHFLMDAQPGEPTPM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6113_d02.zip

Restriction Sites: SgfI-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.

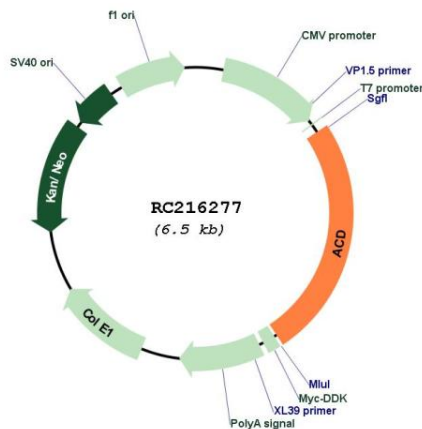
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_022914.2](#)

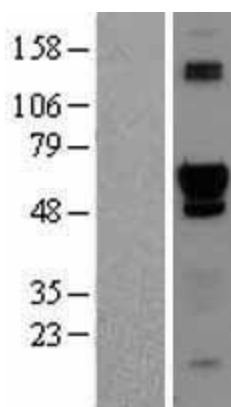
| | |
|---------------|------------------------|
| RefSeq Size: | 2034 bp |
| RefSeq ORF: | 1368 bp |
| Locus ID: | 65057 |
| UniProt ID: | Q96AP0 |
| Cytogenetics: | 16q22.1 |
| MW: | 57.2 kDa |

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]

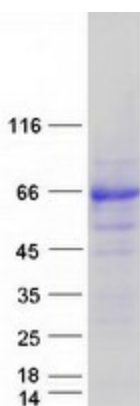
Product images:



Circular map for RC216277



Western blot validation of overexpression lysate (Cat# [LY402957]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216277 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACD protein (Cat# [TP316277]). The protein was produced from HEK293T cells transfected with ACD cDNA clone (Cat# RC216277) using MegaTran 2.0 (Cat# [TT210002]).