

## Product datasheet for RC201664

### TCTP (TPT1) (NM\_003295) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** TCTP (TPT1) (NM\_003295) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** TCTP  
**Synonyms:** HRF; p02; p23; TCTP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC201664 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGATTATCTACCGGGACCTCATCAGCCACGATGAGATGTTCTCCGACATCTACAAGATCCGGGAGATCG  
 CGGACGGGTTGTGCCTGGAGGTGGAGGGGAAGATGGTCAGTAGGACAGAAGGTAACATTGATGACTCGCT  
 CATTGGTGAAAATGCCTCCGCTGAAGGCCCGAGGGCGAAGGTACCGAAAGCACAGTAATCACTGGTGTC  
 GATATTGTCATGAACCATCACCTGCAGGAAACAAGTTTCACAAAAGAAGCCTACAAGAAGTACATCAAAG  
 ATTACATGAAATCAATCAAAGGGAAACTTGAAGAACAGAGACCAGAAAGAGTAAACCTTTTATGACAGG  
 GGCTGCAGAACAAATCAAGCACATCCTTGCTAATTTCAAAAACCTACCAGTTCTTTATTGGTGAAAACATG  
 AATCCAGATGGCATGGTTGCTCTATTGGACTACCGTGAGGATGGTGTGACCCCATATATGATTTTCTTTA  
 AGGATGGTTTAGAAATGGAAAAATGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC201664 protein sequence  
 Red=Cloning site Green=Tags(s)

MIIYRDLISHEMFSDIYKIREIADGLCLEVEGKMVSRTEGNIDDSLIGGNASAEPEGEGTESTVITGV  
 DIVMNHHLQETSFTKEAYKIKDYMKSIKGLLEEQRPERVKPFMTGAAEQIKHILANFKNYQFFIGENM  
 NPDGMVALLDYREDGVTPYMIFFKDGLEMEKC

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6001\\_a06.zip](https://cdn.origene.com/chromatograms/mk6001_a06.zip)



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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003295

**ORF Size:** 516 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.

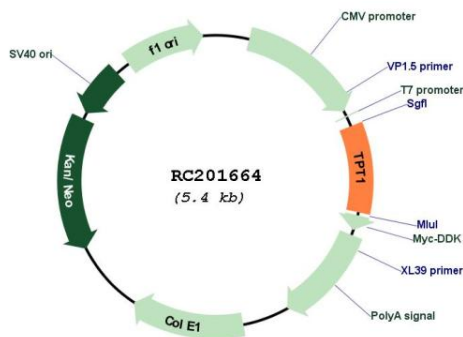
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

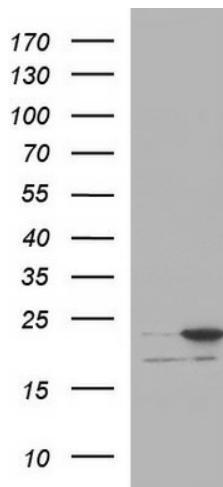
**RefSeq:** [NM\\_003295.4](#)  
**RefSeq Size:** 4649 bp  
**RefSeq ORF:** 519 bp  
**Locus ID:** 7178  
**UniProt ID:** [P13693](#)  
**Cytogenetics:** 13q14.13  
**Domains:** TCTP  
**MW:** 19.6 kDa

**Gene Summary:** This gene encodes a protein that is a regulator of cellular growth and proliferation. Its mRNA is highly structured and contains an oligopyrimidine tract (5'-TOP) in its 5' untranslated region that functions to repress its translation under quiescent conditions. The encoded protein is involved in a variety of cellular pathways, including apoptosis, protein synthesis and cell division. It binds to and stabilizes microtubules, and removal of this protein through phosphorylation is required for progression through mitotic and meiotic cell divisions. This gene is known to play a role in carcinogenesis, and is upregulated in some cancer cells. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2017]

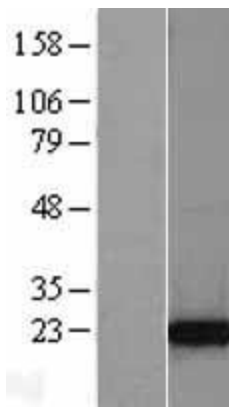
### Product images:



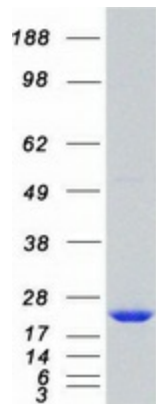
Circular map for RC201664



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TPT1 (Cat# RC201664, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TPT1 (Cat# [TA590155]). Positive lysates [LY401136] (100ug) and [LC401136] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401136]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201664 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TPT1 protein (Cat# [TP301664]). The protein was produced from HEK293T cells transfected with TPT1 cDNA clone (Cat# RC201664) using MegaTran 2.0 (Cat# [TT210002]).