

## Product datasheet for **RG200686**

### TCP1 alpha (TCP1) (NM\_030752) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TCP1 alpha (TCP1) (NM_030752) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TCP1 alpha
Synonyms:	CCT-alpha; CCT1; CCTa; D6S230E; TCP-1-alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG200686 representing NM\_030752  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGGGGCCTTTGTCCGTGTTCCGGTGACCCGAGCACTGGGAAACGATCCGCTCCAAAACGTTATGG  
 CTGCAGCTTCGATTGCCAATATTGTA AAAAGTTCTCTTGGTCCAGTTGGCTTGGATAAAAATTGGTGGA  
 TGATATTGGTGATGTAACCATTACTAACGATGGTGAACCATCCTGAAGTTACTGGAGGTAGAATCCT  
 GCAGCTAAAGTCTTTGTGAGCTGGCTGATCTGCAAGACAAGAAGTTGGAGATGGAACACTTTCAGTGG  
 TTATTATTGCAGCAGAATCCTAAAAATGCAGATGAATTAGTCAAACAGAAAATTCATCCACATCAGT  
 TATTAGTGGCTATCGACTTGCTTGAAGGAAGCAGTGCCTTATATCAATGAAAACCTAATTGTTAACACA  
 GATGAAGTGGGAAGAGATTGCCTGATTAATGCTGCTAAGACATCCATGCTTCCAAAATCATTGGAATAA  
 ATGGTGATTTCTTTGCTAACATGGTAGTAGATGCTGTACTTGGCTATTAATAACACAGACATAAGAGGCCA  
 GCCACGCTATCCAGTCAACTCTGTTAATATTTGAAAAGCCATGGGAGAAGTCAAATGGAGAGTATGCTC  
 ATCAGTGGCTATGCACTCAACTGTGTGGTGGGATCCCAGGGCATGCCAAGAGAATCGTAAATGCAAAAA  
 TTGCTTGCTTGACTTACGCTGCAAAAAACAAAATGAAGCTTGGTGTACAGGTGGTCATTACAGACCC  
 TGAAAACTGGACCAAATTAGACAGAGAGAATCAGATATCACCAAGGAGAGAATTCAGAAGATCCTGGCA  
 ACTGGTGCCAATGTTATTCTAACCACTGGTGGAATTGATGATATGTGTCTGAAGTATTTTGTGGAGGCTG  
 GTGCTATGGCAGTTAGAAGATTTTAAAAAGGGACCTTAAACGCATTGCCAAAGCTTCTGGAGCAACTAT  
 TCTGTCAACCTGGCCAAATTTGGAAGGTGAAGAACTTTGAAGCTGCAATGTTGGGACAGGCAGAAGAA  
 GTGGTACAGGAGAGAATTTGTGATGATGAGCTGATCTTAATCAAAAATACTAAGGCTCGTACGCTGCAT  
 CGATTATCTTACGTGGGCAAAATGATTTTCAATGTGTGATGAGATGGAGCGCTCTTTACATAGTGCATTTG  
 TGTAGTGAAGAGAGTTTTGGAGTCAAAAATCTGTGGTCCCGGTGGGGGTGCTGTAGAAGCAGCCCTTCC  
 ATATACCTTGA AAACTATGCAACCAAGCATGGGGTCTCGGGAACAGCTTGCATTGCAAGATTTGCAAGAT  
 CACTTCTGTATTCCCAATACACTAGCAGTTAATGCTGCCAGGACTCCACAGATCTGGTTGCAAAATT  
 AAGAGCTTTTCATAATGAGGCCAGGTTAACCCAGAACGTAAAAATCTAAAATGGATTGGTCTTGATTTG  
 AGCAATGGTAAACCTCGAGACAACAACAAGCAGGGGTGTTTGAACCAACCATAGTTAAAGTTAAGAGTT  
 TGA AAATTTGCAACAGAAGCTGCAATCACCATTCTCGAATTGATGATCTTATTAATACATCCAGAAG  
 TAAAGATGATAAATGGAAGTTATGAAGATGCTTCACTCTGGAGCCCTTAATGAT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG200686 representing NM\_030752  
 Red=Cloning site Green=Tags(s)

MEGPLSVFGDRSTGETIRSQNVMAAASIANIVKSSLGPVGLDKMLVDDIGDVTITNDGATILKLLVEVHP  
 AAKVLCCELADLQDKEVGDGTTSVVIIAAELLKNADELVKQKIHPTSVISGYRLACKEAVRYINENLIVNT  
 DELGRDCLINAAKTSMSSKIIGINGDFFANMVVDVLAIAKYTDIRGQPRYPVNSVNILKAHGRSQMESML  
 ISGYALNCVVGSQGMPKRIVNAKIACLDFSLQKTKMKLGVQVVITDPEKLDQIRQRESKITKRIQKILA  
 TGANVILTTGGIDDMCLKYFVEAGAMVRRVLKRDLKRIAKASGATILSTLANLEGEETFEAAMLGQAE  
 VVQERICDDELILIKNTKARTSASIIILRGANDFMCDEMERSLHDALCVVKRVLESKSVVPGGAVEAALS  
 IYLENYATSMGSREQLAIAEFARSLLVIPNTLAVNAAQDSTDLVAKLRAFHNEAQVNPERKNLKWIGLDL  
 SNGKPRDNKQAGVFEPTIVKVKSLKFATEAAITILRIDDLIKLHPESKDDKHGSYEDAVHSGALND

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_030752

**ORF Size:** 1668 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.

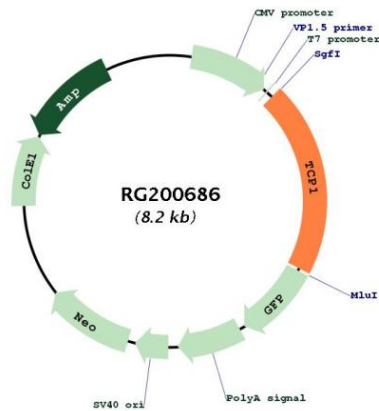
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_030752.3](#)  
**RefSeq Size:** 2463 bp  
**RefSeq ORF:** 1671 bp  
**Locus ID:** 6950  
**UniProt ID:** [P17987](#)  
**Cytogenetics:** 6q25.3  
**Domains:** cpn60\_TCP1

**Gene Summary:** The protein encoded by this gene is a molecular chaperone that is a member of the chaperonin containing TCP1 complex (CCT), also known as the TCP1 ring complex (TRiC). This complex consists of two identical stacked rings, each containing eight different proteins. Unfolded polypeptides enter the central cavity of the complex and are folded in an ATP-dependent manner. The complex folds various proteins, including actin and tubulin. Alternate transcriptional splice variants of this gene, encoding different isoforms, have been characterized. In addition, three pseudogenes that appear to be derived from this gene have been found. [provided by RefSeq, Jun 2010]

### Product images:



Circular map for RG200686