

## Product datasheet for **RC213873**

### TCP1 beta (CCT2) (NM\_006431) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TCP1 beta (CCT2) (NM_006431) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TCP1 beta
Synonyms:	99D8.1; CCT-beta; CCTB; HEL-S-100n; PRO1633; TCP-1-beta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC213873 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCGTCCCTTTCCCTTGCACCTGTTAACATCTTTAAGCAGGAGCTGATGAAGAGAGAGCAGAGACAG  
 CTGCTGACTTCTTTATTGGTGCCATCGCCATTGGAGACTTGGTAAAGAGCACCTGGGACCCAAAGG  
 CATGGACAAAATCTTCTAAGCAGTGGACGAGATGCCTCTCTTATGGTAACCAATGATGGTGCCACTATT  
 CTAACAAAACATTGGTGTGACAATCCAGCAGCTAAAGTTTTAGTTGATATGTCAAGGGTTCAAGATGATG  
 AAGTTGGTATGGCACTACCTCTGTTACCGTTTTAGCAGCAGAATTATTAAGGGAAGCAGAATCTTTAAT  
 TGCAAAAAGATTATCCACAGACCATCATAGCGGGTTGGAGAGAAGCCACGAAGGCTGCAAGAGAGGGC  
 CTGTTGAGTTCTGCAGTTGATCATGGTCCGATGAAGTAAATCCGTCAAGATTTAATGAATATTGCGG  
 GCACAACATTATCCTCAAACTTCTTACTCATCAAAAGACCACCTTACAAGTTAGCTGTAGAAGCAGT  
 TCTCAGACTGAAAGGCTCTGGCAACCTGGAGGCAATTCATATTATCAAGAAGCTAGGAGGAAGTTTGGCA  
 GATTCCTATTTAGATGAAGGCTTCTGTTGGATAAAAAAATTGGAGTAAATCAACAAAACGAATTGAAA  
 ATGCTAAAATTTATTGCAAACTACTGGTATGGATACAGACAAAATAAAGATATTTGGTCCCGGTAAG  
 AGTTGACTCTACAGCAAAGGTTGCGAAAATAGAACATGCGGAAAAGGAAAAAATGAAGGAGAAAAGTTGAA  
 CGTATTCTTAAGCATGGAATAAATTGCTTTATTAACAGGCAATTAATTTAATTAATCCTGAACAGCTCT  
 TTGGTGTCTGGTGTCTATGGCTATTGAGCATGCAGATTTTGCAGGTGTGGAACGCTAGCTCTTGTAC  
 AGGTGGTAAAATTGCCTACCTTTGATCACCCAGAAGCTGGTGAAGCTTGAAGTTGCAAACTTATCGAG  
 GAAGTCATGATTGGAGAAGACAACTCATTCACTTTTCTGGGGTTGCCCTTGGTGAAGCTTGTACATTG  
 TTTTGCCTGGTGGCACTCAACAAAATTTAGATGAAGCAGAAAGATCATTGCATGATGCTCTTTGTGTTCT  
 TCGCAAACTGTAAGGACTCTAGAACAGTTTATGGAGGAGGCTGTTCTGAGATGTTGATGGCTCATGCT  
 GTGACACAGCTTGCCAATAGAACCAGGCAAAGAAGCTGTTGCAATGGAGTCTTATGCTAAAGCACTGA  
 GAATGTTGCCAACCATCATAGCTGACAATGCAGGCTATGACAGTGCAGACCTGGTGGCACAGCTCAGGGC  
 TGCTCACAGTGAAGGCAATACCACTGCTGGATTGGATATGAGGGAAGGCACCATTGGAGATATGGCTATC  
 CTGGGTATAACAGAAAGTTTTCAAGTGAAGCGACAGGTTCTTCTGAGTGCAGCTGAAGCAGCGGAGGTGA  
 TTCTGCGTGTGGACAACATCATCAAGCGGCACCCAGGAAACGTGTCCCTGATCACCACCCTGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213873 protein sequence  
 Red=Cloning site Green=Tags(s)

MASLSLAPVNIKAGADEERAETARLTSFIGAIAIGDLVKSTLGPKGMDKILLSSGRDASLMVNTDGI  
 LKNIGVDNPAKVLVDMRSRVQDDEVDGTTSVTVLAAELLREAESLIAKKIHPQTIAGWREATKAAREA  
 LLSSAVDHGSDEVKFRQDLMNIAGTTLSSKLLTHHKDHFKLAVEAVLRLKSGNLEAIHIKKLGGSLA  
 DSYLDEGFLLDKIGVNPQPKRIENAKILIAN TGMDTDKIKIFGSRVRVDSTAKVAEIEHAEKEKMEKVE  
 RILKHGINCFINRQLIYNPEQLFGAAGVMAIEHADFAVERLALVTGGEIASTFDHPELVKLGSKLIE  
 EVMIGEDKLIHFSGVALGEACTIVLRGATQQILDEAERSLHDALCVLAQTVKDSRTVYGGGCSEMLMAHA  
 VTQLANRTPGKEAVAMESYAKALRMLPTIIADNAGYDSADLVAQLRAAHSEGNTTAGLDMREGTIGDMAI  
 LGITESFQVKRQVLLSAAEAAEILRVDNIIKAAPRKRVPDHHPC

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6609\\_g08.zip](https://cdn.origene.com/chromatograms/mk6609_g08.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_006431

**ORF Size:** 1605 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\\_006431.3](#)

**RefSeq Size:** 1962 bp

**RefSeq ORF:** 1608 bp

**Locus ID:** 10576

**UniProt ID:** [P78371](#)

**Cytogenetics:** 12q15

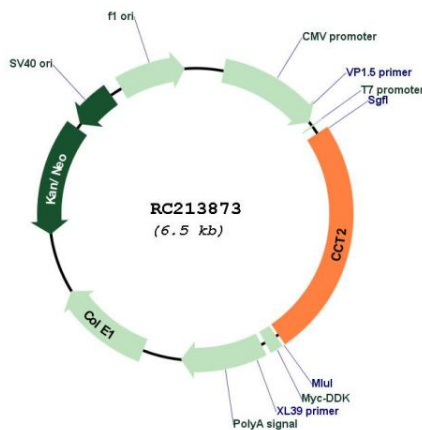
**Domains:** cpn60\_TCP1

**Protein Families:** Druggable Genome

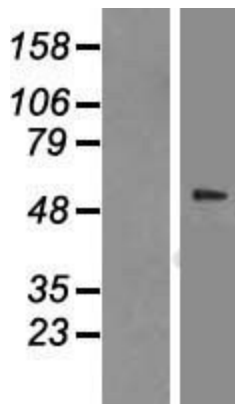
**MW:** 57.5 kDa

**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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2010]

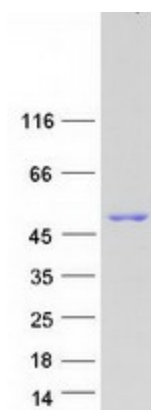
**Product images:**



Circular map for RC213873



Western blot validation of overexpression lysate (Cat# [LY416649]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213873 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CCT2 protein (Cat# [TP313873]). The protein was produced from HEK293T cells transfected with CCT2 cDNA clone (Cat# RC213873) using MegaTran 2.0 (Cat# [TT210002]).