

## Product datasheet for **RG230842**

### TCP1 beta (CCT2) (NM\_001198842) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TCP1 beta (CCT2) (NM_001198842) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CCT2
Synonyms:	99D8.1; CCT-beta; CCTB; HEL-S-100n; PRO1633; TCP-1-beta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG230842 representing NM\_001198842  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCGTCCCTTTCCCTTGCACCTGTTAACATCTTTAAGCAGGAGCTGATGAAGAGAGAGCAGAGACAG  
 CTGCTGACTTCTTTATTGGTCCCATCGCCATTGGAGACTTGGTAAAGAGCACCTTGGACCCAAAGG  
 CATGGACAAAATTCTTCTAAGCAGTGGACGAGATGCCTCTCTTATGGTAACCAATGATGGTGCCACTATT  
 CTAaaaaaacattGGTGTGACAATCCAGCAGCTAAAGTTTTAGTTGATATGTCAAGGGTTCAAGATGATG  
 AAGTTGGTATGGCACTACCTCTGTTACCGTTTTAGCAGCAGAATTATTAAGGGAAGCAGAATCTTTAAT  
 TGCAaaaaaagattCATCCACAGACCATCATAGCGGGTTGGAGAGAAGCCACGAAGGCTGCAAGAGAGGCG  
 CTGTTGAGTTCTGCAGTTGATCATGGTCCGATGAAGTTAAATCCGTCAAGATTTAATGAATATTGCGG  
 GCACAACATTATCCTCAAACTTCTTACTCATCAAAAGACCACCTTACAAAGTTAGCTGTAGAAGCAGT  
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 GATTCTATTTAGATGAAGGCTTCTGTTGGATAAAAAAATTGGAGTAAATCAACCAAAACGAATTGAAA  
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 GAATGTTGCCAACCATCATAGCTGACAATGCAGGCTATGACAGTGCAGACCTGGTGGCACAGCTCAGGGC  
 TGCTCACAGTGAAGGCAATACCACTGCTGGATTGGATATGAGGGAAGGCACCATTGGAGATATGGCTATC  
 CTGGGTATAACAGAAAGTTTTCAAGTGAAGCGACAGGTTCTTCTGAGTGCAGCTGAAGCAGCGGAGGTGA  
 TTCTGCGTGTGGACAACATCATAAAGCGGCACCCAGGAAACGTGTCCCTGATCACCACCCTGT

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG230842 representing NM\_001198842  
 Red=Cloning site Green=Tags(s)

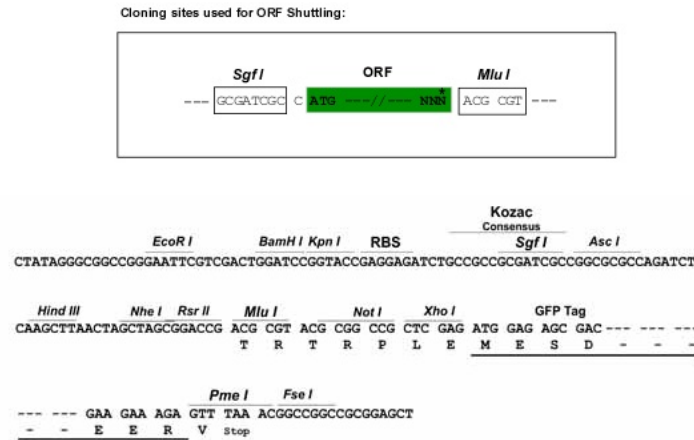
MASLSLAPVNIKFKADEERAETARLTSFIGAIAIGDLVKSTLGPKGMDKILLSGRDASLMVTNDGATI  
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 LLSSAVDHGSDEVKFRQDLMNIAGTTLSSKLLTHHKDHF TKLAVEAVLRLKSGNLEAIIHIKKLGGSLA  
 DSYLDEGFLLDKKIGVNPQKRIENAKILIAN TGMDTDKIKIFGSRVRVDS TAKVAEIEHAEKEKMKKEVE  
 RILKHGINCFINRQLIYNPEQLFGAAGVMAIEHADFAGVERLALVTGGEIASTFDHPELVKLGSKLIE  
 EVMIGEDKLIHFSVALGEACTIVLRGATQQILDEAERSLHDALCVLAQTVKDSRTVYGGGCSEMLMAHA  
 VTQLANRTPGKEAVAMESYAKALRMLPTIIADNAGYDSADLVAQLRAAHSEGNTTAGLDMREGTIGDMAI  
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**TRTRPLE** – GFP Tag – V

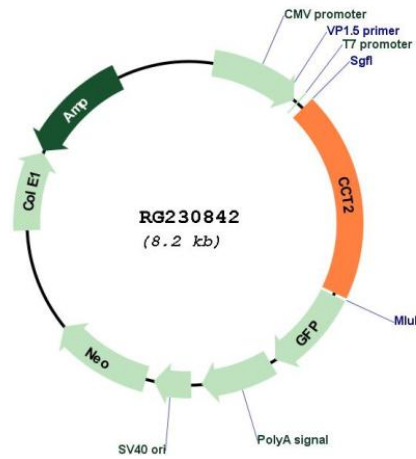
**Restriction Sites:**

Sgfl-MluI

## Cloning Scheme:



## Plasmid Map:



<b>ACCN:</b>	NM_001198842
<b>ORF Size:</b>	1464 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001198842.1</a> , <a href="#">NP_001185771.1</a>
<b>RefSeq Size:</b>	2193 bp
<b>RefSeq ORF:</b>	1467 bp
<b>Locus ID:</b>	10576
<b>UniProt ID:</b>	<a href="#">P78371</a>
<b>Cytogenetics:</b>	12q15
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	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]