

Product datasheet for **RG204358**

TCP1 epsilon (CCT5) (NM_012073) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TCP1 epsilon (CCT5) (NM_012073) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TCP1 epsilon
Synonyms:	CCT-epsilon; CCTE; HEL-S-69; PNAS-102; TCP-1-epsilon
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG204358 representing NM_012073
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGTCCATGGGGACCCTCGCCTTCGATGAATATGGGCGCCCTTCTCATCATCAAGGATCAGGACC
 GCAAGTCCCGTCTTATGGGACTTGAGGCCCTCAAGTCTCATATAATGGCAGCAAAGGCTGTAGCAAATAC
 AATGAGAACATCACTTGGACCAATGGGCTTGATAAGATGATGGTGGATAAGGATGGGGATGTGACTGTA
 ACTAATGATGGGGCCACCATCTTAAGCATGATGGATGTTGATCATCAGATTGCCAAGCTGATGGTGAAC
 TGTCCAAGTCTCAGGATGATGAAATTGGAGATGGAACACAGGAGTGGTTGTCTGGCTGGTGCCTTGTT
 AGAAGAAGCGGAGCAATTGCTAGACCGAGGCATTACCCAATCAGAATAGCCGATGGCTATGAGCAGGCT
 GCTCGCGTTGCTATTGAACACCTGGACAAGATCAGCGATAGCGTCCTTGTGACATAAAGGACCCGAAC
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 GATTGCTGTGAATGCCGTCTCACTGTAGCAGATATGGAGCGGAGAGACGTTGACTTTGAGCTTATCAAA
 GTAGAAGGCAAAGTGGGCGGCAGGCTGGAGGACACTAACTGATTAAAGGCGTGATTGTGGACAAGGATT
 TCAGTCACCACAGATGCCAAAAAAGTGAAGATGCGAAGATTGCAATTCTCACATGTCCATTTGAACC
 ACCCAAACCAAAACAAAGCATAAGCTGGATGTGACCTCTGTGCAAGATTATAAGCCCTTCAGAAATAC
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 GAGAAGCTGGGCTTTGCTGGTCTTGTACAGGAGATCTCATTGGGACAATAAGGATAAAATGCTGGTCA
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 GGAGGAGGGGCTGCTGAGATATCTGTGCCCTGGCAGTTAGCCAAGAGGCGGATAAGTGGCCACCTTAG
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 CATGAATCCCATCCAGACTATGACCGAAGTCCGAGCCAGACAGGTGAAGGAGATGAACCTGCTCTTGGC
 ATCGACTGTTTGACAAGGGGACAAATGATATGAAGCAACAGCATGTATAGAAACCTTGATTGGCAAAA
 AGCAACAGATATCTCTTGCAACACAAATGGTTAGAATGATTTGAAGATTGATGACATTCGTAAGCCTGG
 AGAATCTGAAGAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG204358 representing NM_012073
 Red=Cloning site Green=Tags(s)

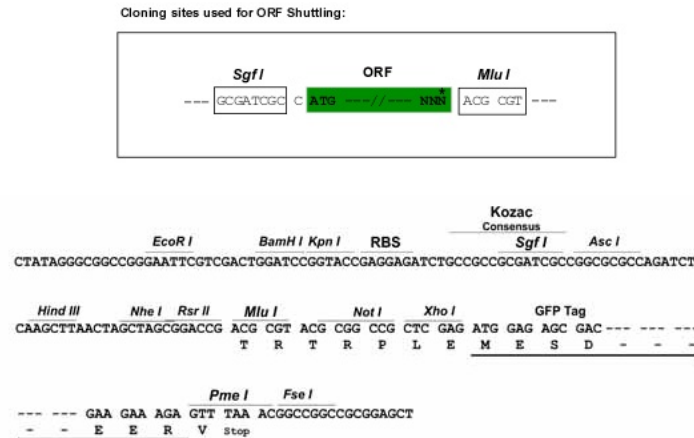
MASMGTLAFDEYGRPFLLIKDQDRKSRLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKMMVDKGDVTV
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 ARVAIEHLDKISDSVLVDIKDTEPLIQTAKTTLGSKVVNSCHRQMAEIAVNAVLTVADMERRDVFELIK
 VEGKVGGRLDTEKLKGVIVDKDFSHPMQPKVEDAKIAILTCPFEPKPKTKHKLDVTSVEDYKALQKY
 EKEKFEEMIQQIKETGANLAICQWGFDEANHLLQNNLPAVRWVGPEIELIAIATGGRIVPRFSELTA
 EKLGFAGLVQEISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIEEAKRSLHDALCVIRNLIRDNRVY
 GGGAAEISCALAVSQEADKCPTEQYAMRAFADALEVIMPALSENSGMNPIQTMTEVRARQVKEMNPALG
 IDCLHKGTDNMQQHVIETLIGKKQISLATQVMRMILKIDDIRKPGSEEE

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_012073

ORF Size: 1623 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 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_012073.2](#)

RefSeq Size: 3403 bp

RefSeq ORF: 1626 bp

Locus ID: 22948

UniProt ID: [P48643](#)

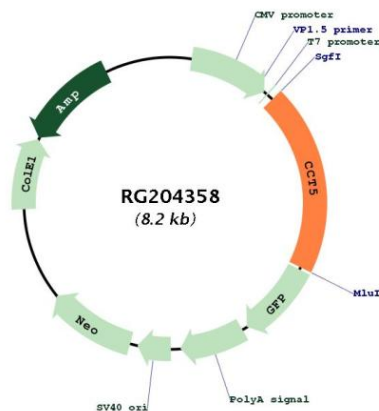
Cytogenetics: 5p15.2

Domains: cpn60_TCP1

Protein Families: Druggable Genome

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. Mutations in this gene cause hereditary sensory and autonomic neuropathy with spastic paraplegia (HSNSP). Alternative splicing results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 5 and 13. [provided by RefSeq, Apr 2015]

Product images:



Circular map for RG204358