

Product datasheet for **RC204358**

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:	Myc-DDK
Symbol:	TCP1 epsilon
Synonyms:	CCT-epsilon; CCTE; HEL-S-69; PNAS-102; TCP-1-epsilon
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC204358 representing NM_012073.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGCGTCCATGGGGACCCTCGCCTTCGATGAATATGGGCGCCCTTTCCTCATCATCAAGGATCAGGAC
CGCAAGTCCCCTTATGGGACTTGAGGCCCTCAAGTCTCATATAATGGCAGCAAAGGCTGTAGCAAAT
ACAATGAGAACATCACTTGGACCAAATGGGCTTGATAAGATGATGGTGGATAAGGATGGGGATGTGACT
GTAATAATGATGGGGCCACCATCTTAAGCATGATGGATGTTGATCATCAGATTGCCAAGCTGATGGTG
GAACTGTCCAAGTCTCAGGATGATGAAATTGGAGATGGAACCACAGGAGTGGTTGTCTGGCTGGTGCC
TTGTTAGAAGAAGCGGAGCAATTGCTAGACCGAGGCATTCACCCAATCAGAATAGCCGATGGCTATGAG
CAGGCTGCTCGCTTGTATTGAACACCTGGACAAGATCAGCGATAGCGTCTTGTGACATAAAGGAC
ACCGAACCCCTGATTAGACAGCAAAAACCACGCTGGGCTCCAAAGTGGTCAACAGTTGTCACCGACAG
ATGGCTGAGATTGCTGTGAATGCCGTCTCACTGTAGCAGATATGGAGCGGAGAGACGTTGACTTTGAG
CTTATCAAAGTAGAAGGCAAAGTGGGCGCAGGCTGGAGGACACTAAACTGATTAAGGGCGTGATTGTG
GACAAGGATTTCACTCAGCACAGATGCCAAAAAAGTGGAAAGTGCAGGATTCGAATTCACATGT
CCATTTGAACCACCCAAACCAAAAAAAGCATAACTGGATGTGACCTCTGTGCAAGATTATAAAGCC
CTTCAGAAATACGAAAAGGAGAAATTTGAAGAGATGATTAACAAATTAAGAGACTGGTGTAAACCTA
GCAATTTGTGAGTGGGGCTTTGATGATGAAGCAATCACTTACTTCTTCAGAACAACCTGGCTGCCGTT
CGCTGGGTAGGAGGACCTGAAATGAGCTGATTGCCATCGCAACAGGAGGGCGGATCGTCCCCAGGTTT
TCAGAGCTCACAGCCGAGAAGCTGGGCTTTGCTGGTCTTGTACAGGAGATCTCATTTGGGACAACAAAG
GATAAAATGCTGGTATCGAGCAGTGAAGAACCTCCAGAGCTGTAAACATTTTATTAGAGAGGAAAT
AAGATGATCATTGAGGAGCGGAAACGATCCCTCACGATGCTTTGTGTGTCATCCGGAACCTCATCCGC
GATAATCGTGTGGTGTATGGAGGAGGGGCTGCTGAGATATCCTGTGCCCTGGCAGTTAGCCAAGAGGCG
GATAAGTGCCCCACCTTAGAACAGTATGCCATGAGAGCGTTTGCCGACGCACTGGAGGTCATCCCCATG
GCCCTCTGAAAACAGTGGCATGAATCCCATCCAGACTATGACCGAAGTCCGAGCCAGACAGGTGAAG
GAGATGAACCCTGCTCTTGGCATCGACTGTTTGCACAAGGGGACAAATGATATGAAGCAACAGCATGTC
ATAGAAACCTTGATTGGCAAAAAGCAACAGATATCTTGAACACAAATGGTTAGAATGATTTTGAAG
ATTGATGACATTCGTAAGCCTGGAGAATCTGAAGAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
  
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Protein Sequence:

>Peptide sequence encoded by RC204358
 Blue=ORF Red=Cloning site Green=Tag(s)

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MASMGTLAFDEYGRPFLIIKDQDRKSRLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKMMVDKGDVDT
VTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGVVVLGALLEEAEQLLDRIHPIRIADGYE
QAARVAIEHLDKISDSVLVDIKDTEPLIQAKTTLGSKVVNSCHRQMAEIAVNAVLTVADMERRDVFDE
LIKVEGKVGRLDCLKIKGVIVDKDFSHQPMPKKVEDAKIAILTCPFEPKPKTKHKL DVTSVEDYKA
LQKYEKEKFEEMIQQIKETGANLAICQWGFDEANHLLLQNNLPAVRWVGPEIELIAIATGGRIVPRF
SELTAEKLGFAGLVQEISFGTTKDKMLVIEQCKNSRAVTFIRGGNKMIIEEAKRSLHDLACVIRNLIR
DNRVVYGGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALSENSGMNPIQTMTEVRARQVK
EMNPALGIDCLKGTNDMKQHVIE TLIGKKQI SLATQMV RMILKIDDIRKPGESEE
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
  
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Recombinant protein using RC204358 also available, [TP304358M](#)

Chromatograms:

https://cdn.origene.com/chromatograms/mk6065_c12.zip

Restriction Sites:

SgfI-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:

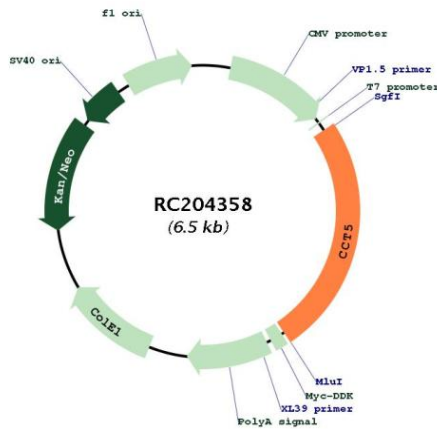
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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](#)

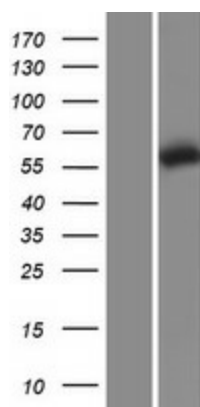
RefSeq Size: 3403 bp
RefSeq ORF: 1626 bp
Locus ID: 22948
UniProt ID: [P48643](#)
Cytogenetics: 5p15.2
Domains: cpn60_TCP1
Protein Families: Druggable Genome
MW: 59.7 kDa

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. 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]

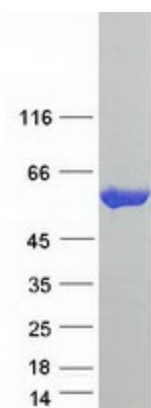
Product images:



Circular map for RC204358



Western blot validation of overexpression lysate (Cat# [LY415998]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204358 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CCT5 protein (Cat# [TP304358]). The protein was produced from HEK293T cells transfected with CCT5 cDNA clone (Cat# RC204358) using MegaTran 2.0 (Cat# [TT210002]).