

Product datasheet for **MC205228**

Ctcl (NM_001013256) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	Ctcl
Synonyms:	1500010J02Rik; AAF-132; AAF132
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>BC060629
 GTATTTTCATCATGACACTTGGTGAATTAGCCCAAGCTGGCAGCCAGGTGTCCATCATTGTACAGATCCCT
 GCTCAGATGGTGTGGCACCAGTCCCTCCGGCCTGGCAGGGCCTATGTAAGTACAAAAATGCAAGTAACCA
 AGACCCGGATTACCTTTCTGTATTTGGACAACCATCCATCTTCAACTCTGAAGCCTCTGAGACCAGG
 TTATGTGCAAGAGCTGGAGCTGGACTTAGAGTTCTCGAAAGCTGACCTTAAACCACCACCCAGCCACC
 AGCTCCAAAGACAGCAGAGGGCAAGAAGGTCTTGTCCGGGCTTCAAAGTCTTGCAATTATTTGGGAACAG
 TCACTGCTGTGTCATGAGTCTGCCGGCCTCTACATTCTAGATGGGCAGCTGATTCTCTGCCTCGCATA
 CCAGAAGATCCATGGCCTCAGGCGGGTTATTCGACCAGGGGTCTGTCTGGAGCTCCGAGATGTTATCTC
 CTCCAGGCAGTGGGTGGAGCAACAACAAACCTGTCTGGCGCTCTGTCTCCATGGCACTGTTCCGGCTTC
 AAGGCTTTTCTGTCTTAAGCCTCTGACTTTGCCGTCTCCAAAGTTTATGGTGCCTCTTGTATGAGCA
 ACTCGTGTGGAATGTCAAGTCTAGGACTTCCCTTATACTTATGGGCTGCCAAGACCCTGGAGGATCTCATC
 TACAAGCTGTGTCCCATGTGTGAGATGTCACCAAGTTCCTGAAGCAACCTCTCCTGGGAAGCCAGCT
 TGGGCTGCAGCTCCTGGCTCCCTCCTGGGATGTTCTGATTCCACCTGGCAGCCCCATGCGGCATGCGTA
 CAGCGAGATCCTGGAAGAACCACAACTGCCCCCTCAGAAATACACTCCACTGCAGACTCCCTACTCT
 TTCCCTACTATGCTCGCCTGGCAGAGGAAGGGCAGCAGGGCTTGGGCTACTTTTGACCCAAAGGCCA
 TGCTGCTCTCCCAAGGCCAGTCACTGACCAGCTGCCAAGTGAATCGCCACCTAGCCTGGTCTGGGT
 CTGTCTGCCATCCTGTGTGTTCCAGCCAGCCAGGTTTACTTGGGGTCTGGTGGCTTCTATCTCGTAA
 GGTTGTCTGGAGCTTCGGGATCTAAGAGGTTCACTGCCTGTATCCCTTGACTGAGAGTTCACAGCCCC
 TCATTGACCCGAATCTCGTAGGCTGCCTGGTGGGTAGAGAAGTTCAGTTGGTAGTAGAGAGAGAAGT
 CAGGAGCAGCTTCCCTTCTGGGAGGAGATGGGCATGGCACGCTTCATCCAGAAGAAGCAGGCCAGAGT
 TACGTCCAGTTCTACCTGGCTGATGCCCTGATCCTGCCGTGCCAGACCCACCTTTGGTTCAGAACCAT
 CTCAGACAGCTCCTCCTGCCAGAGGGACCCACCTGGGACAGAGCCGGCTGTTCTTACTGTCCACAA
 GGAGGCCCTCATGAAACGTAATTTTGTCTCTTCCGGGAGACAGTTACAACCTGCAAAGCCACCTTG
 AGTTTCCACGTGTGAGGAACCTTGGCTTTGTGGCACACAGAGGAAGGAAGTTCTGGATGGAGCCACCCG
 AGTCTCTGGCCGTGAGAGCAAGGATCAGAAGGTCTTCTCATCTTTCTGGCTCTTCAGTTCTGATGGTT
 TCCGTTCTGTACCCAAACCAAGTCTACCGACTCGTGGCTTCCGGCCCCCAGACAGACACAGTGTTCGAG
 ACAGAGGGCTCAGCTGGCACCTCTCGACGTCCTCTGGAAGTGGTGAAGTGTGCTGCTCAGTGTCC
 AAGAGGAGTGGACCTGGAGCTTGGGAGCTCTCAGGACATACCTAATGTACTGGAGGTCCCTAGAACACT
 GCCCAGTCTCCTGAGCCAGCTGCTCGGTGACAACTCCCCGATTCTTGGTATCTTTCTCTGCTGAG
 ATTTTGTCTCGGATCTGTGTGAACCACTCTGGCCCTTCCGGGATGAAACCTGGGAATGCTGGGGCTA
 TTAACACAGGTGTGAAGCTAACAGTAGCTCTAGAAATGGATGACTGTGAATATCCCCCTCACCTGGACAT
 ATATATCGAAGATCCACAGTTGCCTCCCCAAATAGGACTCCTTCCAGGAGCCCGAGTCCACTTTAGCCAG
 CTGGAGAAAAGGATTTCCAGATCCAACATTGTTTACTGTTGTTTCCGGTCATCCACTCTGTGCAAGTCC
 TGAGCTTCCCCCAGAGACCAAGCCAGTGTCTCTGCCACATCTATCTGGCTGAACCTCTCCAAGG
 TGACCGGCTCCCTTCCAGGCCACTACCTCTTGCCATATTGTGTATGCTGCTGAGCCTCAGATCCTGTGG
 GTGTGTGCTCATTGCACCAAGCATCTGCCCCAGGGTAAGTGTAGTCCCGGGACCCAGTTGTCATCTC
 AGAGGGCTGTGAAGCCAGGCCAATCAGGCTCCTGGTGAAGATGGCACCGCAGAAGCGACGGTATCTG
 TAGGAATCATCTTGTGGCAAGGGCACTAGGGCTGAGTCTAGTGTGCTCCTCCATCCTCGAGCATGCC
 AGGGGGCCGGGAGAGTGGCTTGCAGTTTACAGGGCTAGGAGGCCAAACAGAGTCTGCAAGCAAAACCC
 ATGAGCCCTTGACCTGTCTCCTCCGACACTTTGTACAGCCCTTTGTCTCCGACCCGTTAAGCTTTC
 TTTTGCATTTGAAAGGAGACCACTGATATTTCCCCACGAGAACCCTCCCGGCTGCAGCAGTTCCAGTGT
 GGAGAGCTCCCTCTGCTGACCAGAGTGAATCCCAGGCTCCGACTGGTCTGCCTTTCTCTGCAAGGACCGG
 AGCTCCCCAACCTCCACAAGCATCTGCTGCTTCTGTTGATGACACTGCCTAAGGTGGCCCCAGAGTTT
 CCAGGACCCAGACACTGGAGTGAGGAACCTCCTGCCCACTGTGATTTCTAGTTATTCTGGTGTGAGCAT
 GCCTTGGAGACACTGAAACCGCAGATCAGCATGATAATGGTGTTCCTCCAATTGGGTAGAACACC
 TACACTCAGAGGTGACCTCCTGAGTGTGGTCTGCTTGTGGAGAAAGCAGGACGGAGACCTTGC
 CCCTTATGATTGATTGTATTGTATAGGCCCTTTGGGCTACAATAAACTTCTCTGAGGACTTTCAAAAA
 AAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites:

AscI-NotI

ACCN:

NM_001013256

Insert Size:

2901 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	BC060629 , AAH60629
RefSeq Size:	3247 bp
RefSeq ORF:	2901 bp
Locus ID:	68964
UniProt ID:	Q5SUQ9
Cytogenetics:	11 B3

Gene Summary:

Component of the CST complex proposed to act as a specialized replication factor promoting DNA replication under conditions of replication stress or natural replication barriers such as the telomere duplex. The CST complex binds single-stranded DNA with high affinity in a sequence-independent manner, while isolated subunits bind DNA with low affinity by themselves. Initially the CST complex has been proposed to protect telomeres from DNA degradation (PubMed:19854130). However, the CST complex has been shown to be involved in several aspects of telomere replication. The CST complex inhibits telomerase and is involved in telomere length homeostasis; it is proposed to bind to newly telomerase-synthesized 3' overhangs and to terminate telomerase action implicating the association with the ACD:POT1 complex thus interfering with its telomerase stimulation activity. The CST complex is also proposed to be involved in fill-in synthesis of the telomeric C-strand probably implicating recruitment and activation of DNA polymerase alpha. The CST complex facilitates recovery from many forms of exogenous DNA damage; seems to be involved in the re-initiation of DNA replication at repaired forks and/or dormant origins. Involved in telomere maintenance. Involved in genome stability (By similarity). May be involved in telomeric C-strand fill-in during late S/G2 phase (PubMed:22748632).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (α).