

Product datasheet for **RG216893**

Cyclin T2 (CCNT2) (NM_001241) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Cyclin T2
Synonyms:	CYCT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG216893 representing NM_001241
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGTCGGGCGGTGGAGCTTCTTCGCTGGTCTTTACTCGGGAACAGCTGGAGAACACGCCGAGCC
 GCCGCTGCGGAGTGGAGGCGGATAAAGAGCTCTCGTGCCGCCAGCAGGCGGCCAACCTCATCCAGGAGAT
 GGGACAGCGTCTCAATGTCTCTCAGCTTACAATAAACACTGCGATTGTTTATATGCACAGGTTTTATATG
 CACCATTCTTTACCAAATCAACAAAAATAATATCGTCTACTGCATTATTTTGGCTGCAAAAGTGG
 AAGAACAGGCTCGAAACTTGAACATGTTATCAAAGTAGCACATGCTTGTCTTCATCCTCTAGAGCCACT
 GCTGGATACTAAATGTGATGCTTACCTTCAACAGACTCAAGAACTGGTTATACTTGAACCAATAATGCTA
 CAAACTCTAGGTTTTGAGATCACCATTGAACACCCACACACAGATGTGGTGAATGTACCCAGTTAGTAA
 GAGCAAGCAAGGATTTGGCACAGACATCTATTTTCATGGCTACCAACAGTCTGCATCTTACAACCTTCTG
 TCTTCAGTACAAACCAACAGTGATAGCATGTGTATGCATTCATTTGGCTTGCAATGGTCCAATTGGGAG
 ATCCCTGTATCACTGATGGAAGCATTGGTGGGAATATGTGGATCCTACAGTTACTCTAGAATTATTAG
 ATGAGCTAACACATGAGTTTCTACAAATATTGGAGAAAACGCTAATAGGTTGAAGAAGATTCGAAACTG
 GAGGGCTAATCAGGCAGCTAGGAAACCAAAAGTAGATGGACAGGTATCAGAGACCACTTCTTGGTTCA
 TCTTTGGTCCAGAATTCATTTTAGTAGATAGTGTACTGGTGTGCCTACAAACCAAGTTTTAGAAAC
 CATCTACATCAGCATTCCTGCGCCAGTACCTCTAAATTCAGGAAATATTCTGTTCAAGACAGCCATAC
 ATCTGATAATTTGTCAATGCTAGCAACAGGAATGCCAAGTACTTCATACGGTTTATCATCACACCAGGAA
 TGGCCTCAACATCAAGACTCAGCAAGGACAGAACAGCTATATTCACAGAAACAGGAGACATCTTGTCTG
 GTAGCCAGTACAACATCAACTCCAGCAGGACCTTCTATATCACTGCATTAGGATTACATCACAGACC
 TGACAAAAATTCAGATCATTCTTCTGTTAAGCAAGAAATATACTCATAAAGCAGGGAGCAGTAAACACCAT
 GGGCCAATTTCCACTACTCCAGGAATAATTCCTCAGAAAAATGTCTTTAGATAAATATAGAGAAAAGCGTA
 AACTAGAAACTCTTGATCTCGATGTAAGGGATCATTATATAGCTGCCAGGTAGAACAGCAGCACAAACA
 AGGGCAGTCACAGGCAGCCAGCAGCAGTCTGTTACTTCTCCATTAAATGAAATACCTATCGCAAAT
 ACTGAAAAATACATGGCAGATAAAAAAGGAAAAGAGTGGGTCACTGAAATTACGGATTCCAATACCAACCA
 CTGATAAAAGCGCCAGTAAAGAAGAACTGAAAAATGAAAAATAAAGTTTCTTCTCAGAAAGACACAGCTC
 TTCTGATGAAGGCAGTGGGAAAAGCAACATTCAAGCCACATATTAGCAGAGACCATAAGGAGAAGCAC
 AAGGAGCATCTTCAAGCCGCCACACACCAGCAGCCACAAGCATTCCCACTCGCATAGTGGCAGCAGCA
 GCGGTGGCAGTAAACACAGTGCCGACGGAATACCACCACTGTTCTGAGGAGTCTGTTGGCCTGAGCAG
 TGATGGCATTTCTCTAGCTCCAGCTCTTCAAGGAAGAGGCTGCATGTCAATGATGCATCTCACACCAC
 CACTCCAAATGAGCAAAAGTTCCAAAAGTTCAGGTGGGCTACGGACATCTCAGCACCTCGTGAACCTG
 GACAAGAAGCCAGTGGAGACCAACGGTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG216893 representing NM_001241
 Red=Cloning site Green=Tags(s)

MASGRGASSRWFFTREQLENTPSRRCGVEADKELSCRQQAANLIQEMQRLNVSQLTINTAIVYMHRFYM
 HHSFTKFNKNIISSTALFLAAKVEEQARKLEHVIKVAHACLHPLPLELDTKCDAYLQQTQELVILETIML
 QTLGFEITIEHPHTDVVKCTQLVRASKDLAQTSYFMATNSLHLTTFCLQYKPTVIACVCIHLACKWSNWE
 IPVSTDGKHWEYVDPTVLELLDELTHEFLQILEKTPNRLKKIRNWRANQAARKPKVDGQVSETPLLGS
 SLVQNSILVDSVTGPVTPNPSFQKPSTSAFPAPVPLNSGNISVQDSHTSDNLSMLATGMPSTSYGLSSHQE
 WPQHQSARTEQLYSQKETSLSGSQYNINFQQGPSISLHSLHHRPDKISDHSSVKQEYTHKAGSSKHH
 GPISTTPGIIPQKMSLDKYREKRKLETLDLDVRDHYIAAQVEQHKQGSQAASSSSSVTSPIKMKIPIAN
 TEKYMADKKEKSGSLKLRIPPTDKSASKEELKMKIKVSSSERHSSSDEGSGKSKHSSPHISRDKHEKH
 KEHPSSRHHTSSHKSHSHSGSSSGSKHSADGIPPTVLRSPVGLSSDGISSSSSSSRKRLHVNDASHNH
 HSKMSKSSKSSGGLRTSQHPRETGQEASGDQRS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001241

ORF Size: 1989 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.

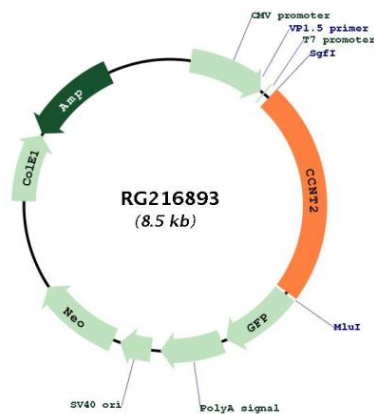
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001241.2](#), [NP_001232.1](#)

RefSeq Size: 4513 bp

RefSeq ORF:	1992 bp
Locus ID:	905
UniProt ID:	O60583
Cytogenetics:	2q21.3
Domains:	CYCLIN, cyclin
Protein Families:	Druggable Genome, Transcription Factors
Gene Summary:	The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin and its kinase partner CDK9 were found to be subunits of the transcription elongation factor p-TEFb. The p-TEFb complex containing this cyclin was reported to interact with, and act as a negative regulator of human immunodeficiency virus type 1 (HIV-1) Tat protein. A pseudogene of this gene is found on chromosome 1. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Dec 2010]

Product images:



Circular map for RG216893