

Product datasheet for **RG236371**

Cyclin T1 (CCNT1) (NM_001277842) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cyclin T1 (CCNT1) (NM_001277842) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Cyclin T1
Synonyms: CCNT; CYCT1; HIVE1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG236371 representing NM_001277842.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAGGGAGAGAGGAAGAACAACAACAAACGGTGGTATTTCACTCGAGAACAGCTGGAAAAATAGCCCA
TCCCGTCGTTTTGGCGTGGACCCAGATAAAGAAGTTTCTTATCGCCAGCAGGCGGCCAATCTGCTTCAG
GACATGGGGCAGCGTCTTAACGTCTCACAATTGACTATCAACACTGCTATAGTATACATGCATCGATTC
TACATGATTGAGTCCCTTACACAGTTCCTGGAAATTCGTGGCTCCAGCAGCCTGTTTCTAGCAGCT
AAAGTGGAGGAGCAGCCAAAAAATTGGAACATGTCATCAAGGTAGCACATACTGTCTCCATCCTCAG
GAATCCCTTCTGATACTAGAAGTGAGGCTTATTTGCAACAAGTCAAGATCTGGTCATTTTAGAAAGC
ATAATTTTGCAGACTTTAGGCTTTGAACTAACAATTGATCACCCACATACTCATGTAGTAAAGTGCACT
CAACTTGTTCGAGCAAGCAAGGACTTAGCACAGACTTCTACTTCATGGCAACCAACAGAAGTGCACAA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236371
Blue=ORF Red=Cloning site Green=Tag(s)

```
MEGERKNNKRWYFTREQLNSPSRRFGVDPDKELSYRQQAANLLQDMGQRLNVSQTLINTAIVYMHRF
YMIQSFTQFPNGSVAPAALFLAAKVEEQPKKLEHVIVKVAHTCLHPQESLPDRSEAYLQQVQDLVILES
IILQTLGFELTIDHPHTHVVKCTQLVRASKDLAQTSYFMATNRTDT
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: SgfI-MluI



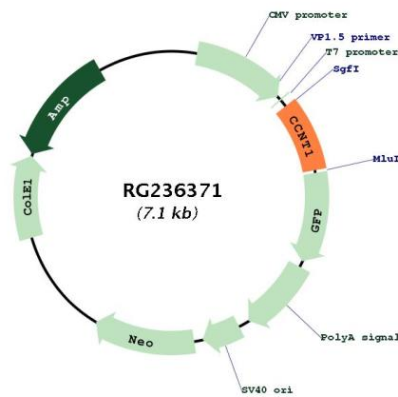
[View online >](#)

Cloning Scheme:


- ACCN:** NM_001277842
- ORF Size:** 552 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).
- RefSeq:** [NM_001277842.2](#)
- RefSeq Size:** 6915 bp
- RefSeq ORF:** 555 bp
- Locus ID:** 904
- UniProt ID:** [O60563](#)
- Cytogenetics:** 12q13.11-q13.12
- Protein Families:** Druggable Genome, Transcription Factors
- MW:** 21.7 kDa

Gene Summary:

This gene encodes a member of the highly conserved cyclin C subfamily. The encoded protein tightly associates with cyclin-dependent kinase 9, and is a major subunit of positive transcription elongation factor b (p-TEFb). In humans, there are multiple forms of positive transcription elongation factor b, which may include one of several different cyclins along with cyclin-dependent kinase 9. The complex containing the encoded cyclin and cyclin-dependent kinase 9 acts as a cofactor of human immunodeficiency virus type 1 (HIV-1) Tat protein, and is both necessary and sufficient for full activation of viral transcription. This cyclin and its kinase partner are also involved in triggering transcript elongation through phosphorylation of the carboxy-terminal domain of the largest RNA polymerase II subunit. Overexpression of this gene is implicated in tumor growth. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2013]

Product images:


Circular map for RG236371