

## Product datasheet for **SC334265**

### Cyclin T1 (CCNT1) (NM\_001277842) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin T1 (CCNT1) (NM_001277842) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cyclin T1
Synonyms:	CCNT; CYCT1; HIVE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001277842
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:	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
RefSeq:	<u><a href="#">NM_001277842.1</a></u> , <u><a href="#">NP_001264771.1</a></u>
RefSeq Size:	6915 bp
RefSeq ORF:	555 bp
Locus ID:	904



[View online »](#)

UniProt ID: [O60563](#)

Cytogenetics: 12q13.11-q13.12

Protein Families: Druggable Genome, Transcription Factors

**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]

Transcript Variant: This variant (b, also known as dE7 and CycT1b) lacks an exon in the coding region, which results in a frameshift and an early stop codon, compared to variant a. The encoded isoform (b) has a shorter and distinct C-terminus, compared to isoform a. While this variant may be considered a candidate for nonsense-mediated decay, experimental evidence suggests that it is protein coding (PMID: 23569210 and PMID: 22692005). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.