

## Product datasheet for **RG214419**

### Tin2 (TINF2) (NM\_012461) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tin2 (TINF2) (NM_012461) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tin2
Synonyms:	DKCA3; TIN2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214419 representing NM_012461 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTACGCCCTGGTGGCGGGTCCCGCAGCTCTACGTTTCGCCCGCGGGCTAGCTGGCAGGTTGTGC  
GCGGACGTGCGTGGAACATTTCCGCGAGTACTGGAGTTTCTGCGATCTCTGCGCGCTGTTGCCCTGG  
CTTGGTTTCGCTACCGGCACCACGAACGCCTTTGTATGGGCCTAAAGGCCAAGGTGGTGGAGCTGATC  
CTGCAGGGCCGGCCTTGGGCCAAGTCTGAAAGCCCTGAATCACCCTTTCCAGAATCTGGACCTATAG  
TGCGGGATCCCAAGGCTACAAAGCAGGATCTGAGGAAGATTTGGAGGCACAGGAACTTTTACCAGCA  
GGTGAAGCAGCTGTCAGAGGCTCCTGTGGATTTGGCCTCGAAGCTGCAGGAACTTGAACAAGAGTATGGG  
GAACCTTTCTGGCTGCCATGAAAAGCTGCTTTTGGTACTTGTGTCAGCTGGAGAAAGCACTGCCTA  
CACCGCAGGCACAGCAGCTTCAGGATGTGCTGAGTTGGATGCAGCCTGGAGTCTCTATCACCTCTTCTCT  
TGCTGGAGACAATATGGTGTGGACATGGGGTGGCTGCTTCCAGAGTGTCTGTTACTGACTCAGTGAAC  
CTGGCTGAGCCATGGAACAGAACTCCTCCTCAGCAACAAAGACTAGCACTCCACAATCCCCTGCCAAAAG  
CCAAGCCTGGCACACATCTTCTCAGGGACCCTTCAAGGACGCACCCAGAACCCTAGCTGGCCGACA  
CTTCAATCTGGCCCTCTAGGCCGACGAAGAGTTCAAGTCCCAATGGCCCTCCACTAGGGGAGGCCATAAG  
GAGCGCCCAACAGTCATGCTGTTCCCTTAGGAATCTCGCTCACCAACCCAGGTCATATCTAATCCTG  
AGAGCAAGGAAGAACATGCGATATACACAGCAGACCTAGCCATGGGCACAAAGAGCACCCCAATGGGAA  
GTATAAGGGTCCATACCAGACCCTGGGGGAAGGGCTCTGAAGGAGAACCAGTTGACTTGCCTGCCACA  
GAGCAAAAGGAG

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG214419 representing NM\_012461  
Red=Cloning site Green=Tags(s)

MATPLVAGPAALRFAAAASWQVVRGRCVEHFPRVLEFLRSLRAVAPGLVRYRHHERLCMGLKAKVVVELI  
 LQGRPWAQVLKALNHHFPESGPIVRDPKATKQDLRKILEAQETFYQQVKQLSEAPVDLASKLQELEQEYG  
 EPFLAAMEKLLFEYLCQLEKALPTPQAQQLQDVL SWMQPGVSITSSLAWRQYGVDMGWLLPECSVTDSVN  
 LAEPMEQNPPQQRLALHNPLPKAKPGTHLPQGPSRTHPEPLAGRHFNLAPLGRRRVQSQWASTRGGHK  
 ERPTVMLFPFRNLGSPTQVINSNPESKEEHAIYTADLAMGTRAPSNGKYKGPYQTLGGRALKENPVLDLPAT  
 EQKE

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_012461

**ORF Size:** 1062 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.

**RefSeq:** [NM\\_012461.1](#), [NP\\_036593.1](#)

**RefSeq Size:** 2095 bp

**RefSeq ORF:** 1065 bp

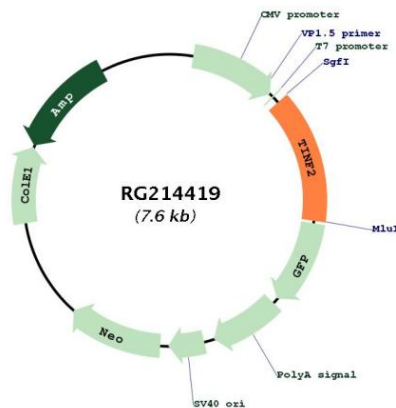
**Locus ID:** 26277

**UniProt ID:** [Q9BSI4](#)

**Cytogenetics:** 14q12

**Gene Summary:** This gene encodes one of the proteins of the shelterin, or telosome, complex which protects telomeres by allowing the cell to distinguish between telomeres and regions of DNA damage. The protein encoded by this gene is a critical part of shelterin; it interacts with the three DNA-binding proteins of the shelterin complex, and it is important for assembly of the complex. Mutations in this gene cause dyskeratosis congenita (DKC), an inherited bone marrow failure syndrome. [provided by RefSeq, Mar 2010]

### Product images:



Circular map for RG214419