

Product datasheet for RC214419

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:	Myc-DDK
Symbol:	Tin2
Synonyms:	DKCA3; TIN2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214419 representing NM_012461 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCTACGCCCTGGTGGCGGGTCCCGCAGCTCTACGTTTCGCCGCCGCGGCTAGCTGGCAGGTTGTGC
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 CTTGGTTCGCTACCGGCACCAAGCGCTTTGTATGGGCCTAAAGGCCAAGGTGGTGGAGCTGATC
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 GGTGAAGCAGCTGTCAGAGGCTCCTGTGGATTTGGCCTCGAAGCTGCAGGAACCTGAACAAGAGTATGGG
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 CCAAGCCTGGCACACATCTTCTCAGGGACCATCTTCAAGGACGCACCCAGAACCCTAGCTGGCCGACA
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 GAGCAAAAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC214419 representing NM_012461
 Red=Cloning site Green=Tags(s)

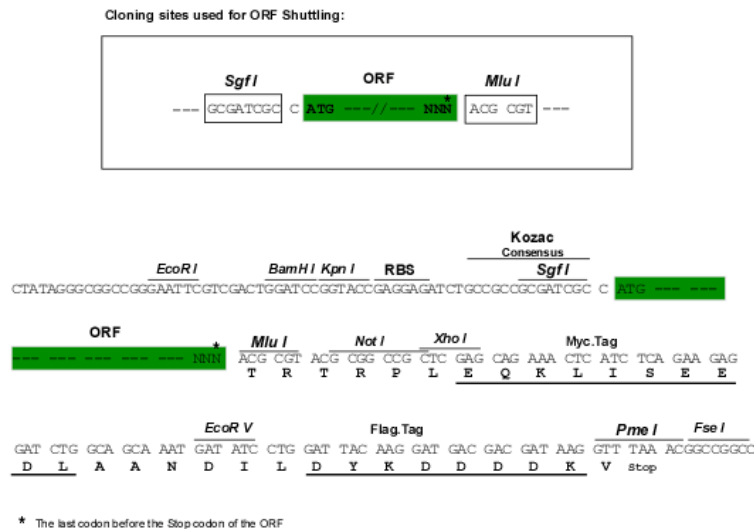
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 EPFLAAMEKLLFEYLCQLEKALPTPQAQQLQDVLSSWMQPGVSITSSLAWRQYGVDMGWLLPECSVTDSVN
 LAEPMEQNPPQQRLALHNPLPKAKPGTHLPQGPSSRTHPEPLAGRHFNLAPLGRRRVQSQWASTRGGHK
 ERPTVMLFPFRNLGSPTQVISKPESEEHAITYADLAMGTAASTGKSKSPCQTLGGRALKENPVDPAT
 EQKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6047_d01.zip

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.

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

RefSeq: [NM_012461.3](#)

RefSeq Size: 2095 bp

RefSeq ORF: 1065 bp

Locus ID: 26277

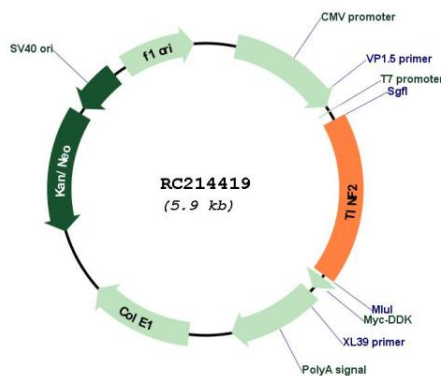
UniProt ID: [Q9BSI4](#)

Cytogenetics: 14q12

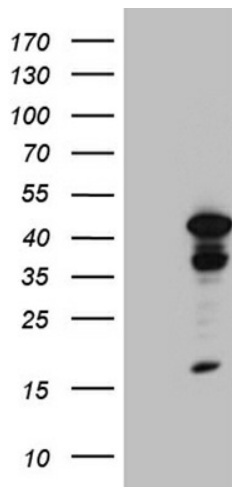
MW: 39.3 kDa

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]

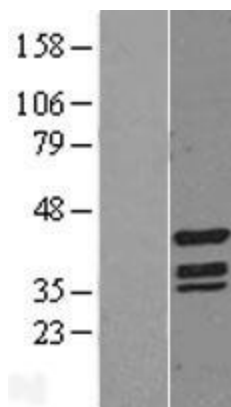
Product images:



Circular map for RC214419



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TINF2 (Cat# RC214419, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TINF2 (Cat# [TA809776])(1:2000). Positive lysates [LY402217] (100ug) and [LC402217] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402217]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214419 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).