

Product datasheet for RC205904

TRF1 (TERF1) (NM_003218) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRF1 (TERF1) (NM_003218) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRF1
Synonyms:	hTRF1-AS; PIN2; t-TRF1; TRBF1; TRF; TRF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205904 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAGGATGTTTCCTCAGCGGCCCGAGCCCGGGGCTGTGCGGATGGTAGGGATGCCGACCCTA
CTGAGGAGCAGATGGCAGAAACAGAGAGAAACGACGAGGAGCAGTTCGAATGCCAGGAACTGCTCGAGTG
CCAGGTGCAGGTGGGGCCCCGAGGAGGAGGAGGAGGAGGAGGAGGAGGACGCGGCCCTGGTGGCCGAGGCC
GAGGCCGTGGCTGCCGGCTGGATGCTCGATTTCTCTGCCTCTCTTTGCGGAGCTTCCGCGACGGCC
GCTCCGAGGACTCCGCAGGACCCGCAACAGCGCAGAGGCTATTATTCATGGACTATCCAGTCTAACAGC
TTGCCAGTTGAGAACGATATACATATGTCAATTTTGGACAAAGATTGCAGCAGGAAAAACCTTGATGCA
CAGTTTAAAAATGATGAACGAATTACACCTTGAATCAGCCCTGATGATTTGGGGTTCAATTGAAAAGG
AACATGACAACTTCATGAAGAAATACAGAATTAATTAATAATTCAGGCTATAGCTGTTTGTATGAAAA
TGGCACTTTAAAGAAGCAGAAGAAGTCTTTGAAAGAATTTGGTGATCCAAATTCATATGCCTTTT
AAAAGCAAATGCTTATGATAATCTCTCAGAAAGATACATTTTCCTTTTCAACACTTCAGCTACA
ACCACATGATGGAGAAAATTAAGAGTTATGTGAATTATGTGCTAAGTGAAAAATCATCAACCTTTCTAAT
GAAGGCAGCGGCAAAAGTAGTAGAAAGCAAAAGGACAAGAACAATAACTCTCAAGATAAACCTAGTGTT
AATGATGTTGAAATGAAACTGAAGCTAATTTGGATACAAGAAAAGGTCACAGAATCTTTCTTAT
CTAAGTTGCAACATGGAACCCAGCAACAAGACCTTAATAAGAAAAGAAAGAGTAGGAACCTCTCAAAG
TACAAAAAAGAAAAAAGAAAGCAGAAGGCCACTGAAAGCAGAATACCTGTTTCAAAGAGTCAGCCGGTA
ACTCTGAAAAACATCGAGCTAGAAAAAGACAGGCATGGCTTTGGGAAGAAGACAAGAAATTTGAGATCTG
GCGTGAGGAAATATGGAGAGGAAACTGGTCTAAAATACTGTTGCATTATAAATTCACAACCGGACAAG
TGTCATGTTAAAAGACAGATGGAGGACCATGAAGAACTAAAACCTGATTTCTCAGACAGCGAAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205904 protein sequence
 Red=Cloning site Green=Tags(s)

MAEDVSSAAPSPRGCADGRDADPTTEEQMAETERNDEEQFECQELLECVQVQGAPEEEEEEDAGLVAEA
 EAVAAGWMLDFLCLSLCRAFRDGRSEDFRRTNSAEAIHGLSSLTACQLRTIYICQFLTRIAAGKTLDA
 QFENDERITPLESALMIWGSIEKEHDKLHEEIQNLIKIQAIIVCMENGNFKEAEVFERIFGDPNSHMPF
 KSKLLMIISQKDTFHSFFQHF SYNHMMEKIKSYVNYVLSEKSSFTLMKAAAKVVEKRTRTITSQDKPSG
 NDVEMETEANLDRKRSHKFLSKLQHGTTQQDLNKKERRVGTQSTKKKKESRRATESRIPVSKSQPV
 TPEKHRARKRQAWLWEEDKNLRSGVRKYGEGNWSKILLHYKFNNRTSVMLKDRWRTMKKLKLISSDSED

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6551_f12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003218

ORF Size: 1257 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_003218.4](#)

RefSeq Size: 2900 bp

RefSeq ORF: 1260 bp

Locus ID: 7013

UniProt ID: [P54274](#)

Cytogenetics: 8q21.11

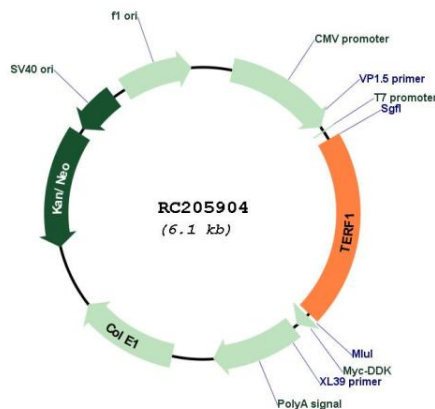
Domains: myb_DNA-binding

Protein Families: Transcription Factors

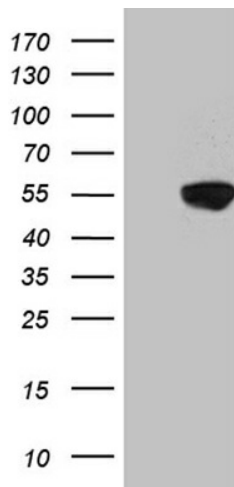
MW: 48.2 kDa

Gene Summary: This gene encodes a telomere specific protein which is a component of the telomere nucleoprotein complex. This protein is present at telomeres throughout the cell cycle and functions as an inhibitor of telomerase, acting in cis to limit the elongation of individual chromosome ends. The protein structure contains a C-terminal Myb motif, a dimerization domain near its N-terminus and an acidic N-terminus. Two transcripts of this gene are alternatively spliced products. [provided by RefSeq, Jul 2008]

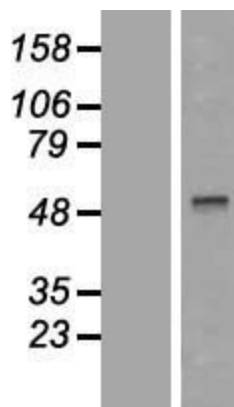
Product images:



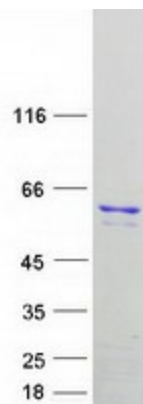
Circular map for RC205904



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TRF1 (Cat# RC205904, 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-TERF1 (Cat# [TA812205]). Positive lysates [LY418833] (100ug) and [LC418833] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418833]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205904 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TRF1 protein (Cat# [TP305904]). The protein was produced from HEK293T cells transfected with TRF1 cDNA clone (Cat# RC205904) using MegaTran 2.0 (Cat# [TT210002]).