

Product datasheet for **MG226635**

Terf2 (NM_009353) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Terf2 (NM_009353) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Terf2
Synonyms:	TRF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226635 representing NM_009353
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTGCGGGAGCCGGGACAGCGGGCCCTGCTTCCGGCCGGGGCTTGTGCGTGACCCGATGGCGTCAC
 AGCCAAGGAAACGGCCAGTCGGGAGGGCGGGGAGGGCGGGGAGGGCGAGCGCGGTGCGAACACGATGGC
 GGGAGGAGGGCGGAGCAGCGATAGCAGCGGGCGGGCGGCGAGCCGACGGGCATCGCGCAGCGGGCGCGG
 GCTCGACGGGGCGACACGAGCCAGGGTTGGGAGGCGCGGCCGAGCGGGCGCGGGGAAGCTCGCCTGG
 AGGAGGGCGTCAACCGCTGGGTGCTCAAGTTCTATTTCCACGAGGCGCTGCGGGCCTTCGGAGTAGCCG
 GTACCGGGACTTCAGGCAGATCCGGGACATCATGCAGGCGTTGCTTGTGACGGCCCTTGGGAAGGAGCAT
 ACGGTGTCCCGTTGCTGCGGGTATGCAGTGTCTGTCGCGCATTGAAGAAGGAGAAAATTTAGACTGTT
 CCTTTGATATGGAGGCTGAGCTCACACCCTTGAATCAGCTATCAATGTGCTGGAGATGATTAACAGAA
 GTTCACACTGACAGACTCTATGGTTGAATCCAGCAGAAAAGTGGTCAAGGAGGCTGCTGTCATTATTTGT
 ATCAAAAAACAAAGAAATTTGAAAAGGCTTCAAAGATTTTAAAAAATACATGTCTAAGGACCCCACTC
 AGAAGCTGAGAAGTATCTCCTGAACATATCCGGGAAAAGAAGTGGCCACCCCTGTTATCCAGAAGT
 TTCTATGAGGTCTTCCAGCAGAAGATGCTGCGTTTCTAGAGAGCCACCTGGATGACACGGAGCCCTAC
 CTCCTCACGATGGCTAAAAAGCTTTGAAATCTGAATCAGCTGCTTCAAGTACAATGAGGGAAGAAAAGC
 ACCCAGAGCCAGTGAAAAACCCTTAGAGAGCCTCAAGACAGCCTCAGAACCTCCAGCCACCATCGG
 GATCAGGACTCTGAAGGCAGCTTCAAAGCTCTGTCTACTGCACAAGACTCAGAGGCCGCTTTTGAAAA
 CTGGACCAGAAAGATCTGGTACTTGCTAATCTGGCATCCCCATCATCACCAGCCCAAAACACAAGAGAC
 CCAGGAAAGATGAACATGAAAGCGCAGCTCCTGCTGAGGGTGAAGGAGGCTCAGACCGCCAGCCAGGAA
 CAGTCCCATGACAATAAGCAGATTGCTGTTGGAGGAGGACAGCCAGAGTACTGAGCCAGCCAGCCAGGCCTC
 AACTCCTCCACAAAGCCATGTCAGCATCCAAGCCAGAGCTCTCAACCAACCCACCCGGGGGAGAAGA
 AGCCCAAAGCATCCAAGACAAGTGAACAGCCCTAACGGGCTTGAAGAAAAGGAAGTTTGGTTGGAAGA
 GGACCAGCTGTTTGAAGTTCAGGCACCAGGTGAAGACAGGTATCCAGTTTAAACAAGAAAGCAGAAGTGG
 ACCATAGAAGAAAGCGAGTGGGTGAAGGATGGAGTGCAGCAATACGGGAAAGGAAACTGGGCTGCCATTT
 CTAAGTATACCCTTTGTCAACCGAACAGCTGTGATGATTAAGACCGCTGGCGGACCATGAAAAAAGT
 TGGCATGAAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG226635 representing NM_009353
 Red=Cloning site Green=Tags(s)

MAAGAGTAGPASGPGVVRDPMASQPRKRPSREGGEGEGERRSNTMAGGGSSDSSGRAASRRASRSRSGR
 ARRRGRHEPGLGGAERGAGEARLEEAVNRWVLFYFHEALRAFRRSRYRDFRQIRDIMQALLVRPLGKEH
 TVSRLLRVMQCLSRIEEENLDCSFDMEAELETPLESAINVLEMIKTEFTLTDSMVESSRKLVKAAVVIC
 IKNKEFEKASKILKKYMSKDPTTQKLRDLDLNIIREKNLAHPVIQNF SYEVFQKMLRFLESHLDDTEPY
 LLTMAKKALKSESAASSTMREEKHPEPEKPLREPPRQPQNPPATIGIRTLKAAFALSTAQDSEAAFAK
 LDQKDLVLANLSPSSPAHKHKRPRKDEHESAAPAEEGGSDRQPRNSPMTISRLLLEEDSQSTEPSPGL
 NSSHKAMSASKPRALNQPHPGKPKKASKDKWNSPNGLEEKEVWLEEDQLFEVQAPGEDRSSSLTRKQKW
 TIEESEWVKDGVRYGEGNWAAISKSYPFVNRATAVMIKDRWRMTMKKLGMM

TRTRPLE – GFP Tag – V

Chromatograms:

https://cdn.origene.com/chromatograms/ja2015_e04.zip

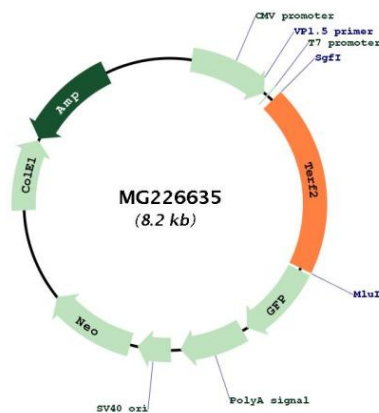
Restriction Sites:

Sgfl-MluI

RefSeq Size: 2664 bp
RefSeq ORF: 1623 bp
Locus ID: 21750
Cytogenetics: 8 53.59 cM

Gene Summary: Binds the telomeric double-stranded 5'-TTAGGG-3' repeat and plays a central role in telomere maintenance and protection against end-to-end fusion of chromosomes. In addition to its telomeric DNA-binding role, required to recruit a number of factors and enzymes required for telomere protection, including the shelterin complex, TERF2IP/RAP1 and DCLRE1B/Apollo. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded 5'-TTAGGG-3' repeats added by telomerase and protects chromosome ends; without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways. Together with DCLRE1B/Apollo, plays a key role in telomeric loop (T loop) formation by generating 3' single-stranded overhang at the leading end telomeres: T loops have been proposed to protect chromosome ends from degradation and repair. Required both to recruit DCLRE1B/Apollo to telomeres and activate the exonuclease activity of DCLRE1B/Apollo. Preferentially binds to positive supercoiled DNA. Together with DCLRE1B/Apollo, required to control the amount of DNA topoisomerase (TOP1, TOP2A and TOP2B) needed for telomere replication during fork passage and prevent aberrant telomere topology. Recruits TERF2IP/RAP1 to telomeres, thereby participating in to repressing homology-directed repair (HDR), which can affect telomere length. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226635