

Product datasheet for **MG215861**

Terb1 (NM_180958) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Terb1 (NM_180958) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Terb1
Synonyms:	4930532D21Rik; BB085179; Ccdc79
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG215861 representing NM_180958
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAGTGAGAAGCCAAAGAAAAACACAAGAAATGAAGACTGACCTGAAGTTACTGTTGGAATGTCTGA
 AGTATCACATGGGCAACCCCTTTGTCAAAAAGGAAGTTTTGATCACGATTCATTAGTTTGTAAACAAAA
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

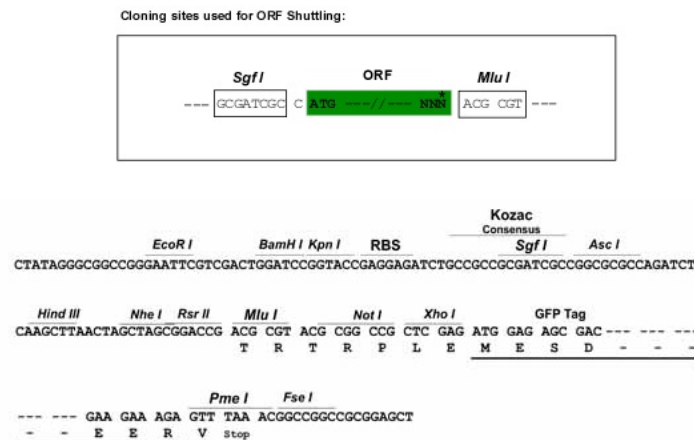
Protein Sequence: >MG215861 representing NM_180958
 Red=Cloning site Green=Tags(s)

MESEKPKKTQEMKTDLKLLECLKYHMGNPLSQKEVLITIHVSCKQNSDAGIYFREIGGLMFIINLAKSS
 EQSLVKEAALYTLGSAEENVYCQQLCTSELFQDLTGLLTNDSTNLKRMSSVYVLLVLSNNRNGQTL
 VREVGCIIEVLQMFRTVLSNYELNLSDNSVFQSYLLWSSVCSTLCVCVNNPQNDENQMLCCSLFPCVNEW
 LMNMRPEVIRPICSFIGLTLANNTHAQNCVFSSGGLDVLQVQLVQLESDSHNTLSSAKLAVIVTKTMDA
 CITDNSAFTTVLSKYHIVSTLLALLHESLDSREKFSIILAIGHCTEDCEKNQYELLKNNGLPLMIQAL
 TEFKNEDLSKAATYVLHNCKKITGKLSLSLQNSFGENEIELKDISEKETLREHWKAAKEILCRIKQFEK
 GGKEEKQQRSGHYKDNTPSMKVNIQTNLKRLCADSTGGTRAEDKDINQSRELRSYKPSSEIMSKACANEN
 QLTTTRKKNTPVHPFCKEKGQSKIVHETTPSCAQNLDEKTFDQKDSVSQSSDQVLKHLPHTVKNRKQVP
 ETDPTFLCLDIIDREVGIAQDSCSRMLKYTCGCIIVARKLLNSRNFSKFLHSCAYQCVHHKVIMEAEDK
 YKNELRKFTICAKKILLTPCRRRLCKESTASEELKIVHQKPDSSKPLGLEAQAALNTSIPEAMERRSPVP
 GQSGLHKKRRIRKDFTEEVNLYLFGVKTGMGNHWSILWSFPFQKGRRAVDLAHKYHRLIKGPSAAL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_180958

ORF Size: 2304 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_180958.3](#), [NP_851289.2](#)

RefSeq Size: 2950 bp

RefSeq ORF: 2307 bp

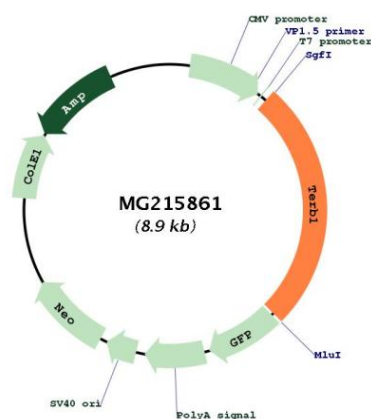
Locus ID: 320022

UniProt ID: [Q8C0V1](#)

Cytogenetics: 8 D3

Gene Summary: Meiosis-specific telomere-associated protein involved in meiotic telomere attachment to the nucleus inner membrane, a crucial step for homologous pairing and synapsis (PubMed:24885367, PubMed:24413433, PubMed:26548954). Component of the MAJIN-TERB1-TERB2 complex, which promotes telomere cap exchange by mediating attachment of telomeric DNA to the inner nuclear membrane and replacement of the protective cap of telomeric chromosomes: in early meiosis, the MAJIN-TERB1-TERB2 complex associates with telomeric DNA and the shelterin/telosome complex. During prophase, the complex matures and promotes release of the shelterin/telosome complex from telomeric DNA (PubMed:26548954). In the MAJIN-TERB1-TERB2 complex, TERB1 probably mediates association with the shelterin/telosome complex via interaction with TERF1, promoting priming telomeric DNA attachment' (PubMed:26548954). Promotes telomere association with the nuclear envelope and deposition of the SUN-KASH/LINC complex (PubMed:24885367, PubMed:24413433). Also recruits cohesin to telomeres to develop structural rigidity (PubMed:24413433).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215861