

Product datasheet for **MG227454**

Trim33 (NM_053170) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Trim33 (NM_053170) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Trim33
Synonyms: 8030451N04Rik; AI413936; Ecto; Tif1g
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG227454 representing NM_053170
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGGCGGAAAACAAGGCGGGGTGAGGCAGAGAGTGGCGGGGGGCGAGCGGTAGCGGCCGGTAACCG
 CCGGGGCCCGGGCCACGGCGCAGGAGGCGGAGCCGCCTCTCGCCGGTGTGGTGGAGGAGGAGGA
 GGAGGAAGGCGGCAGGGCTGGCGCGGAGGGCGGTGCGGCTGGGCCGACGACGGGGGGTGGCCGGCC
 TCCTCAAGCTCGGCCCGCCGCTCGTCCCCGCGCCTCAGTGGCTCCGCGGTCCCCGAGGCGCGG
 CATCGACGCCGGTCCAGCTGTGCCCCAGCCCCGGCCCCGGCCCCGGCCCCGGCCCCGGCTCC
 CGCCCCGGCTCCTGGTTCCTCGTCGGGGCCACCTCTCGGACCACAGCCTCGCTTCTGGACACTGCGCG
 GTGTGTCAGCAGAGCTTGACAGAGCCGGCGGAGGCGGAGCCCAAGCTGCTCCCCTGCCTGCACTCCTTCT
 GCCTGCGTGTCTGCCGGAGCCGGAGCGCCAGCTCAGCGTGCCCATCCCTGGGGGAGCAACGGTGACGT
 CCAGCAAGTTGGTGAATACGGTGTCCAGTATGTCGTCAAGAATGTAGACAGATAGATCTTGTGGATAAT
 TATTTTGTGAAAGACACATCTGAAGCTCCTAGCAGCTCTGATGAGAAATCAGAACAGGTATGTAAGT
 GTGAAGATAATGCAAGTGCAGTTGGTTTTGTGTAGAATGTGGAGAGTGGCTGTGAAGACATGCATTGA
 AGCACATCAAAGAGTAAAATTCATAAAGACCACCTGATCAGGAAAAAAGAAGATGTCTCAGAGTCTGTT
 GGAACATCTGGTCAGCGCCAGTGTGTTGTCCTGTACATAAACAAGAGCAGTTGAAACTATTCTGTGAAA
 CGTGTGATAGATTGACGTGTAGAGACTGTCAACTTTTGGAGCACAAAGAACATAGGTATCAGTTTTTAGA
 AGAGGCTTTTCAAATCAGAAAGGTGCAATTGAAAATCTGTTGGCTAAGCTTCTTGAAGAAGAATTAT
 GTTCATTTGACGCTACACAAGTGCAGAAATAGGATTAAGAAGTAAATGAGACTAACAAACGTGTAGAAC
 AGGAAATTAAGTGGCCATCTTACCCTTATCAATGAAATTAATAAGAAAGGAAATCTCTTGAACA
 GCTAGAGAATGTTACAAAAGAAAGACAGATGAAGTTACTACAGCAGCAGAAATGATATCACAGGCCTCC
 CGGCAGGTGAAGCATGTTATGAACTTTACAAACTGGGCCATTGCAAGTGGCAGCAGCACGGCCCTACTTT
 ATAGCAAGCGTCTGATTACTTTTCAAGTACGTCATATTTGAAAGCCCGATGTGATCCTGTTCTGCTGC
 CAATGGAGCAATTCGTTCCATTGTGATCCACCTTCTGGCCAAAAATGTAGTGAATTTAGGTAATCTA



[View online »](#)

GTAATAGAGAGTAAGCCAGCTCCTGGTTAACTCCTAATGTTGTAGTTGGCAAGTTCCTCCAGGGACAA
 ACCACATTAGTAAAACCCCTGGACAGATTAATTTAGCACAGCTTCGACTCCAGCAGATGCAGCAACAAGT
 GTATGCACAGAAACATCAGCAGTTACAACAGATGAGACTGCAGCAACCACCAGCTCCTATACCAACAACA
 ACAGCAACAACCCAGCAGCATCCTAGGCAAGCAGCCCCACAGATGTTACAACAACAGCCTCCAAGATTGA
 TCAGTGTGCAACAATGCAAAGAGGCAACATGAACTGTGGAGCATTTCAGGCCATCAAATGAGACTGGC
 TCAGAAATGCTGCCAGAATACCAGGGATCCCCAGGCACAGTGCCCTCAGTATCCATGATGCAGCCACAT
 CTCCAAGACAACATTCAAATCCAGGACATGCTGGACCGTTTCCTGTTGTATCAGCACACAACCCAATCA
 ACCCAACAAGTCCCACCACAGCAACTATGGCAAATGCAAATCGAGGTCCCACCAGCCGCTGTTACAGC
 AATAGAATTAATACCCTCAGTCACCAATCCAGAAAACCTTCCATCGTTGCCAGATATCCCACCTATACAG
 TTGGAAGATGCTGGCTCAAGTAGTTTAGATAATCTACTGAGTAGATATATCTCAGGCAGTCATCTACCCC
 CTCAGCCTACAAGTACCATGAATCCTTCCCAGGACCCTCTGCGTTATCACCTGGATCTTCAGGCTTATC
 CAATTCTCACACACCTGTGAGACCCCTAGCACGTCTAGTACTGGCAGTCGAGGCAGCTGCGGATCATCA
 GGAAGAAGTGTGAGAAAAGTGTCTATAGTTTCAAGTCTGATCAGGTGAAGGTCAAGCAGGAACCTGGGA
 CTGAAGAAGAGATATGCAGCTTTTCAGGAGCTGTGAAACAAGAGAAGACAGAGGATGGCAGGAGGAGTGC
 CTGTATGTTGAGCAGTCTGAGAGTAGTTTGACACCACCTCTTCAACTAACCTTACCTAGAGAGTGTGAG
 CTGGATACATTAAACAGGCCTGGAGAACCAGTGAAGACTGAACCTACAGATATCAGTGAAAGCTGCAAAAC
 AGTCAGGACTCAGTAACCTAGTCAATGGAAGTCTCCAATTGAAACCTCATGCACAGGTCGGCAAGGAT
 TGGAGGGGATGGCAATAGCAAAGATGATGACCCAAATGAAGACTGGTGTGCCGTCTGCCAGAACGGAGGG
 GATCTTTTGTGTTGTGAGAAATGTCGAAGGTCTTTCATCTTACCTGTGATGTTCCAACACTTCTCAGCT
 TTCCAAGTGGAGACTGGATATGCACATTTTGCAGAGATATTGGGAAGCCAGAAGTTGAATATGATTGTGA
 TAATATGCAGCATAGTAAGAAGGGGAAAACCTGCACAAGGCTTAAAGCCTGTGGACCAAGGAAATGTGAA
 CGTCTTCTGCTTACCTCTATTGTACGAATTAAGTATTGAATTCAGGAGCCTGTTCTGTTTCGATAC
 CAAACTACTATAAAAATTATAAGAAAACCGATGGATTTATCAACGGTGAAGAAGAAGCTTCAGAAAAACA
 TTCCCAGCATTACCAAATCCAGATGACTTTGTGGCTGATGTCGTTTGTACTTCAAGAACTGTGAAAGG
 TTTAATGAAATGATGAAAGTTGTTCAAGTTTATGCAGACACACAAGAGATTAATTTGAAGGGTGATTGAG
 AAGTAGCTAAGGCAGGAAAGCAGTTGCATTGTACTTTGAAGATAAACTCTCAGAGATCTACTCAGACAG
 GACCTTCACTCTTTGCCAGAGTTTGTGAGCAGGACGAAGATGATGGTGAAGTAACAGAAGACTCTGACGAA
 GATTTTATACAGCCTCGTAGAAAACGCCTAAAGTCAGACGAGAGACCAGTACATATAAAG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227454 representing NM_053170
 Red=Cloning site Green=Tags(s)

MAENKGGGEAESGGGSGSAPVTAAGAAPTAEPLAAVLVEEEEEEGGRAGAEGGAAGPDDGGVAAA
 SSSSAPAASVPAASVGSVAVPAASTPAPAAAPAPAPAPAPAPAPAGSSSGPPLGPPASLLDTC
 VCQQLSRREAEPKLLPCLHSFCLRCLPEPERQLSVPVPGGSDVQVQVIRCPVCRQECRQIDLVDN
 YFVKDTSEAPSSSDEKSEVQVCTSCEDNASAVGFCVECGEWLCKTCEAHQVRVFKDHLIRKKEDVSESV
 GTSGQRPVFCPVHKQEQLKLFCECTDRLTCRDCQLLEHKEHRYQFLEEAFQVQKGAIEENLLAKLLEKKNY
 VHFAATQVQNRRIKEVNETNKRVEQEIKAIFTLINENKKGKSLQLENVTKERQMKLLQQQNDITGLS
 RQVKHVMFTNWAIASGSSTALLYSKRLITFQLRHLKARCDPVAANGAIRFHCDPTFWAKNVVNLGNL
 VIESKPAPGYTPNVVVGQVPPGTNHISKTPGQINLAQLRLQHMQQVYAQKHQQLQMQMLQPPAPIPPT
 TATTQQHPRQAAPQMLQQPPRLISVQTMQRGMNCGAFQAHQMLAQNAARIPGIPRHSAPQYSMMQPH
 LQRQHSNPGHAGFPVSAHNPINPTSPATTMANANRGPTSPSVTAIELIPSVTNPENLPSLPDIPPIQ
 LEDAGSSSLDNLLSRYISGSHLPPQPTSTMNPSPGPSALSPGSSGLSNSHTPVRPPSTSTGSRGSCGSS
 GRTAEKSAHSFKSDQVKVQEPGTEEEICFSFGAVKQEKTEDGRRSACMLSSPESSLTPPLSTNLHLESE
 LDTLTLGLENHVKTEPTDISESCKQSGLSNLVNGKSPIRNLMHRSAIRIGGDGNSKDDDPNEDWCAVCQNGG
 DLLCCEKCPKVFHLLTCHVPTLLSFPDGDWICTFCRDIGKPEVEYDCDNMQHKKGKTAQGLSPVDQRKCE
 RLLLYLYCHELSIEFQEPVPSIPNYYKIIKKPMDLSTVKKLQKKSQHYQIPDDFVADVRLIFKNKER
 FNEMMKVQVYADTQEINLKGDESEVAKAGKAVALYFEDKLSIYSDRTFTPLPEFEQDEDDGEVTEDESDE
 DFIQPRRRLKSDERPVIK

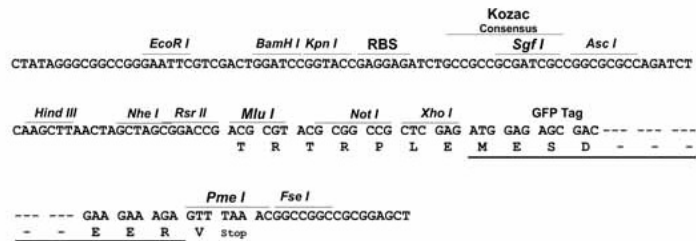
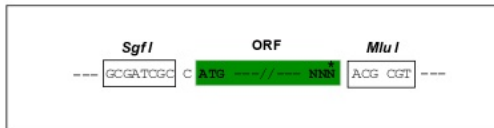
TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1812_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_053170

ORF Size: 3420 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_053170.3](#), [NP_444400.2](#)

RefSeq Size: 8868 bp

RefSeq ORF: 3423 bp

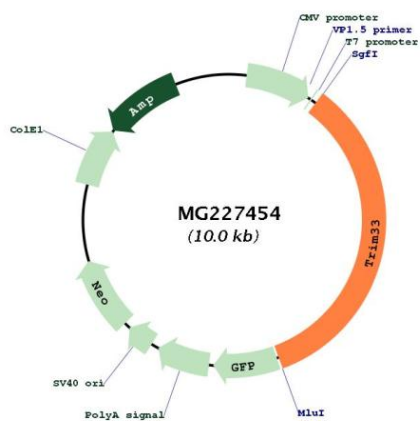
Locus ID: 94093

UniProt ID: [Q99PP7](#)

Cytogenetics: 3 F2.2

Gene Summary: Acts as an E3 ubiquitin-protein ligase. Promotes SMAD4 ubiquitination, nuclear exclusion and degradation via the ubiquitin proteasome pathway (By similarity). May act as a transcriptional repressor (By similarity). Inhibits the transcriptional response to TGF-beta/BMP signaling cascade (By similarity). Plays a role in the control of cell proliferation (By similarity). Its association with SMAD2 and SMAD3 stimulates erythroid differentiation of hematopoietic stem/progenitor. Monoubiquitinates SMAD4 and acts as an inhibitor of SMAD4-dependent TGF-beta/BMP signaling cascade (Monoubiquitination of SMAD4 hampers its ability to form a stable complex with activated SMAD2/3 resulting in inhibition of TGF-beta/BMP signaling cascade) (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG227454