

## Product datasheet for **RG201488**

### **TMEM33 (NM\_018126) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TMEM33 (NM_018126) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TMEM33
Synonyms:	1600019D15Rik; Pom33; SHINC-3; SHINC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201488 representing NM_018126 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGATACGACCCCGAACGGCCCCAAGGGGCGGGCGCTGTGCAATTCATGATGACCAATAAACTGG  
ACACGGCAATGTGGCTTCTCGCTTGTTCACAGTTTACTGCTCTGCTCTGTTTGTCTGCCTCTTCTTGG  
GTTGCATGAAGCAGCAAGCTTTTACCAACGTGCTTTGCTGGCAAATGCTCTTACCAGTCTCTGAGGCTG  
CATCAAAGATTACCACACTTCCAGTTAAGCAGAGCATTCTGGCCAGGCTTTGTTAGAGGACAGCTGCC  
ACTACCTGTTGTATTCATCATCTTTGTAATTCCTATCCAGTTACAATGAGTATCTTCCAGTCTTGTT  
ATTCTCTTTGCTTCATGCTGCCACATATACGAAAAGGTCCTTGACGCAAGGGGCTCAAATAGTTTACCT  
CTGCTGAGATCTGTCTTGACAAATTAAGTGCTAATCAACAAAATATTCTGAAATTCATTGCTTGAATG  
AAATATTCCTGATGCCTGCGACAGTTTTTATGCTTTTTAGTGGTCAAGGAAGTTTGTCCAACTTTTAT  
ATACTATAGATTTCTTACCCTTCGATATTCGTCTCGAAGAAACCCATATTGTCGGACCTTATTTAATGAA  
CTGAGGATTGTTGTTGAACATAATAATGAAACCTGCTTGCCCACTGTTTGTGAGAAGACTTTGTCTCC  
AGAGCATTGCCTTTATAAGCAGATTGGCACCAACAGTTCCA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG201488 representing NM\_018126  
 Red=Cloning site Green=Tags(s)

MADTTPNGPQGAGAVQFMMTNKLDTAMWLSRLFTVYCSALFVLP LLGLHEAASFYQRALLANALTSALRL  
 HQRLPHFQLSRAFLAQUALLEDSCHYLLYSLIFVNSYPVTMSIFPVLLF SLLHAATYTKKVL DARGSNLSP  
 LLRSVLDKLSANQQNILKFIACNEIFLMPATVFMLFSGQGSLLQPFIYYRFL TLRYSRRNPYCRTLFNE  
 LRIVVEHIIMKPACPLFVRRLCLQSI AFISRLAPTVP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_018126

**ORF Size:** 741 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\\_018126.3](#)

**RefSeq Size:** 2684 bp

**RefSeq ORF:** 744 bp

**Locus ID:** 55161

**UniProt ID:** [P57088](#)

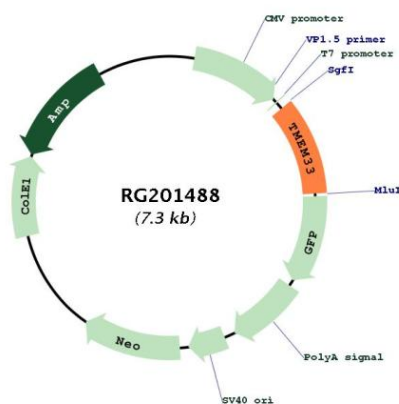
**Cytogenetics:** 4p13

**Domains:** UPF0121

**Protein Families:** Transmembrane

**Gene Summary:** Acts as a regulator of the tubular endoplasmic reticulum (ER) network. Suppresses the RTN3/4-induced formation of the ER tubules (PubMed:25612671). Positively regulates PERK-mediated and IRE1-mediated unfolded protein response signaling (PubMed:26268696). [UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RG201488