

Product datasheet for **RC201488**

TMEM33 (NM_018126) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TMEM33 (NM_018126) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TMEM33
Synonyms: 1600019D15Rik; Pom33; SHINC-3; SHINC3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC201488 representing NM_018126
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGATACGACCCCGAACGGCCCCAAGGGGCGGGCGCTGTGCAATTCATGATGACCAATAAACTGG
ACACGGCAATGTGGCTTCTCGTTGTTACAGTTTACTGCTCTGCTCTGTTTGTCTGCCTCTTCTTGG
GTTGCATGAAGCAGCAAGCTTTTACCAACGTGCTTTGCTGGCAAATGCTCTTACCAGTCTCTGAGGCTG
CATCAAAGATTACCACACTTCCAGTTAAGCAGAGCATTCTGGCCAGGCTTTGTTAGAGGACAGCTGCC
ACTACCTGTTGTATTCATCATCTTTGTAATTCCTATCCAGTTACAATGAGTATCTTCCAGTCTTGTT
ATTCTCTTTGCTTCATGCTGCCACATATACGAAAAGGTCCTTGACGCAAGGGGCTCAAATAGTTTACCT
CTGCTGAGATCTGCTTGGACAAATTAAGTGCTAATCAACAAAATATTCTGAAATTCATTGCTTGAATG
AAATATTCCTGATGCCTGCGACAGTTTTTATGCTTTTTAGTGGTCAAGGAAGTTTGTCCAACTTTTAT
ATACTATAGATTTCTTACCCTTCGATATTCGTCTCGAAGAAACCCATATTGTCGGACCTTATTTAATGAA
CTGAGGATTGTTGTTGAACATAATAATGAAACCTGCTTGCCCACTGTTTGTGAGAAGACTTTGTCTCC
AGAGCATTGCCTTTATAAGCAGATTGGCACCAACAGTTCCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC201488 representing NM_018126
Red=Cloning site Green=Tags(s)

MADTTPNGPQGAGAVQFMMTNKLDAMWLSRLFTVYCSALFVLP LLGLHEAASFYQRALLANALTSALRL
 HQRLPHFQLSRAFLAQUALLEDSCHYLLYSLIFVNSYPVTMSIFPVLLF SLLHAATYTKKVL DARGSNLSP
 LLRSVLDKLSANQQNILKFIACNEIFLMPATVFMLFSGQGSLLQPFIYYRFLTLRYSSRRNPYCR LTFNE
 LRIVVEHIIMKPACPLFVRRRLCLQSI AFISRLAPTVP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

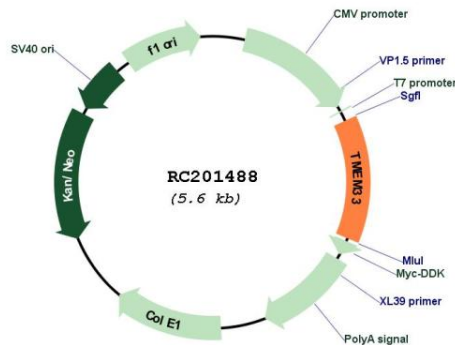
Domains: UPF0121

Protein Families: Transmembrane

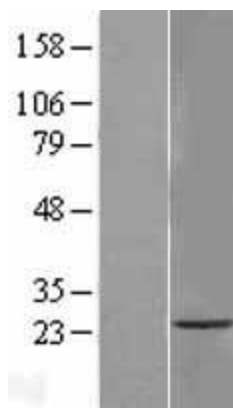
MW: 27.8 kDa

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 RC201488



Western blot validation of overexpression lysate (Cat# [LY402651]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201488 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).