

Product datasheet for **MG221073**

Tmem67 (NM_177861) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tmem67 (NM_177861) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tmem67
Synonyms:	5330408M12Rik; b2b1163.1Clo; b2b1291.1Clo; B230117007
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG221073 representing NM_177861
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTACCATGGTGACGCGTACAAGGCCCTGTGGCGGCCATGGCGGTGATCTCGTTCTTCATCCCGGA
 CTGGCACCGCCTACCTTCTCTTAGTTCTCTGCGAAGTCTCATGGGCACAAATCTTCTCCTCCCTTTCCG
 GCGGCCTGAGACCTGCGACTTCAACCACTACTTTGACATCTCGGCGCTCTCCTGTGCCCCCTGTGGCGCC
 AACCCAGCGCGGGATGCACTAGGAACCTCCTGTGTATGTCTACCAGGATATCATATGATCTCTAATAATG
 GAGGACCTTCTATTATTTGTAAGAAAGTGTCCAGAAAACATGAAAGGCGTTACTAAAGATGGCTGGGACTG
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 AAGAATTTGGCAACCAAAACACTAGTGGATGAAAGATTTCTGATC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG221073 representing NM_177861
 Red=Cloning site Green=Tags(s)

MGMTVTRTRPVAAMAVRSRSSRTGTAYLLLVLCEVSWAQIFSPFRRPETCDFNQYFDISALSCAPCGA
 NQRDALGTSCVCLPGYHMISNNGGPSIICKKCPENMKGVTKDGWDCISCPSTGLTAEKCHCPTGHILVE
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 VISTARYGELGMSLNSEWFAYLQATAAACWTHANLTSQALGNMCMVMNMSYDSTLTDACRLFHYIFES
 TAGLISVHSVPFWRQNLPLWLYGDPQPLAPQVLSTTLPPTNFSFKGQNQLKFAASYDIRGNFIKWQPLE
 GGVLQLCPDTERRLDAAYAFGTTYQQNCEISLSKLLVDFSSPVFYDVYLEYTDEEQHRYLWPIPVLNLN
 QHNKLFVNQDSSSSKWLTRRIFLVDVAVSGRENDLGNQPRVIRVATQISLSIRLVPNTKNGNIYTPLLTI
 AYSDIDIKNAHSQSAKISFSVKYEMNQGDASVHTDIALGVLGGLAVLSSLLKTAGWKRRIGSPMIDLQTV
 MKFLLYYAGDLANVFFIITVGTGLYWLIFFAKQKSVSVLLPMPVQEERFVTVVGCFAFMKALQFLHKFIS
 QISIDIFFIDWERPKGKVLKAVEGEGGVSATVPVSIWRTYFVANENEIQTVRKINPLFQVLTTLFFLE
 VVGFKNALMDSSSSLRNPSDYTAPYSRILRYAVATAIWLIGIQVFFAAFYERFIEDKIRQFV DLC
 SMSNVSVFLLSHRCFGYYIHGRSVHGHADTNMEEMNMLKREAENLCSQRGLVPNTDQGTQFIIVSSQMR
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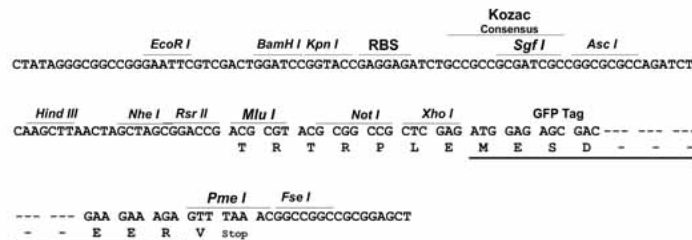
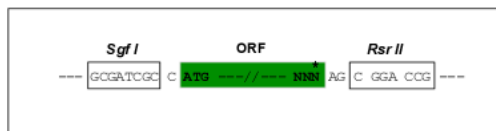
SGPTRRRLE - GFP Tag - V

Restriction Sites:

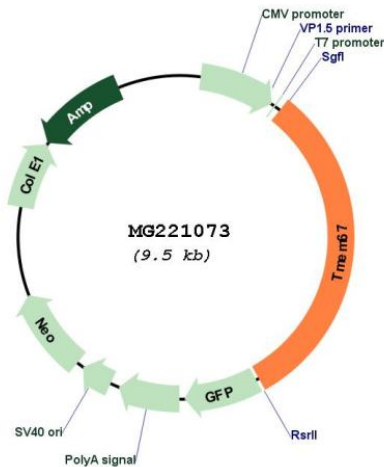
SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_177861

ORF Size: 2985 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_177861.4](#), [NP_808529.2](#)

RefSeq Size: 3456 bp

RefSeq ORF: 2988 bp

Locus ID: 329795

UniProt ID: [Q8BR76](#)

Cytogenetics: 4 A1

Gene Summary: Part of the tectonic-like complex which is required for tissue-specific ciliogenesis and may regulate ciliary membrane composition. Involved in centrosome migration to the apical cell surface during early ciliogenesis. Required for ciliary structure and function, including a role in regulating length and appropriate number through modulating centrosome duplication. Required for cell branching morphology. Essential for endoplasmic reticulum-associated degradation (ERAD) of surfactant protein C (sftpc).[UniProtKB/Swiss-Prot Function]