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# Product datasheet for RG223501

## TMEM107 (NM_032354) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Tag:** | TurboGFP |
| **Symbol:** | TMEM107 |
| **Synonyms:** | GRVS638; JBTS29; MKS13; PRO1268 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-AC-GFP (PS100010) |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |

**ORF Nucleotide Sequence:**

>RG223501 representing NM_032354
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCCGGGTCTCAGGGCTTGTGCCCTCTCGCTTCCTGACGCTCCTGGCGCATCTGGTGGTCGTCATCA
CCTTATTCTGGTCCCGGGACAGCAACATACAGGCCTGCCTGCCTCTCACGTTCACCCCCGAGGAGTATGA
CAAGCAGGACATTCATCCACTTCCTCTCTGCAGGCTGGTGGCCGCGCTCTCTGTCACCCTGGGCCTCTTT
GCAGTGGAGCTGGCCGGTTTCCTCTCAGGAGTCTCCATGTTCAACAGCACCCAGAGCCTCATCTCCATTG
GGGCTCACTGTAGTGCATCCGTGGCCCTGTCCTTCTTCATATTCGAGCGTTGGGAGTGCACTACGTATTG
GTACATTTTTGTCTTCTGCAGTGCCCTTCCAGCTGTCACTGAAATGGCTTTATTCGTCACCGTCTTTGGG
CTGAAAAAGAAACCCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG223501 representing NM_032354
Red=Cloning site Green=Tags(s)

MGRVSGLVPSRFLTLLAHLVVVITLFWSRDSNIQACLPLTFTPEEYDKQDIHPLPLCRLVAALSVTLGLF
AVELAGFLSGVSMFNSTQSLISIGAHCSASVALSFFIFERWECTTYWYIFVFCSALPAVTEMALFVTVFG
LKKKPF

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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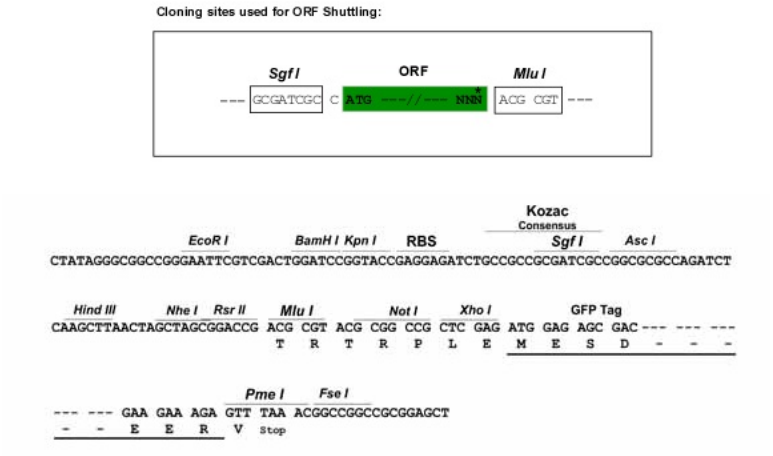
**Cloning Scheme:**




**ACCN:** NM_032354

**ORF Size:** 438 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.

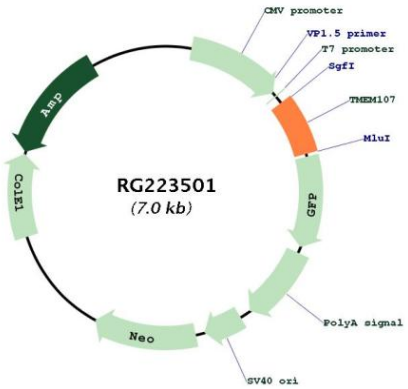
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_032354.5 |
| **RefSeq Size:** | 1533 bp |
| **RefSeq ORF:** | 441 bp |
| **Locus ID:** | 84314 |
| **UniProt ID:** | Q6UX40 |
| **Cytogenetics:** | 17p13.1 |
| **Protein Families:** | Transmembrane |
| **Gene Summary:** | This gene encodes a transmembrane protein and component of the primary cilia transition zone. The encoded protein regulates ciliogenesis and ciliary protein composition. Human fibroblasts expressing a mutant allele of this gene exhibit reduced numbers of cilia, altered cilia length, and impaired sonic hedgehog signaling. In human patients, different mutations in this gene cause different ciliopathies, including Meckel-Gruber syndrome and orofaciodigital syndrome. [provided by RefSeq, May 2017] |

**Product images:**




Circular map for RG223501