

Product datasheet for **MG202491**

Tmed10 (NM_026775) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Tmed10
Synonyms:	1110014C03Rik; p23; p24delta; Tmp21
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG202491 representing NM_026775
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGGTTTGTTGGCCACTCTCCCGCCTGGCCCTCTCCCGTCCGCCTGGCTCTTCTGTTGCTGC
TCGGCCCCAGCTCGGTCTCGGCATCTCCTTCCATCTGCCCGTGAAGTCTCGCAAGTGTCTCCGAGAGGA
GATCCACAAGGACCTGCTGGTACGGGGCGCTACGAGATCACCGACCAGTCTGGGGGCGCTGGCGGCCTG
CGCACCCACCTCAAGATCACAGATTCTGCTGGCCATATTCTGTATGCCAAGAGGATGCAACCAAGGGGA
AGTTTGCCTTTACCACGGAAGACTATGACATGTTTGAAGTGTGTTTTGAGAGCAAGGGAACAGGGCGGAT
ACCTGACCAACTCGTGATTCTAGACATGAAGCATGGAGTAGAGGCGAAAAATTGAAGAGATTGCAAAA
GTGAGAAACTCAAACCTGGAGGTGGAGTTACGACGGCTCGAGGACCTTCCGAGTCCATTGTTAATG
ACTTTGCCTACATGAAGAAGCGGGAAGAGGAGATGAGGGACACTAATGAGTCCACGAACACCCGGTCTCT
GTACTTCAGCATCTTTCCATGTTCTGCCTCATTGGACTAGCCACCTGGCAGGTCTTCTACCTGCGTCGC
TTCTTCAAGGCAAGAAGTTGATAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG202491 representing NM_026775
Red=Cloning site Green=Tags(s)

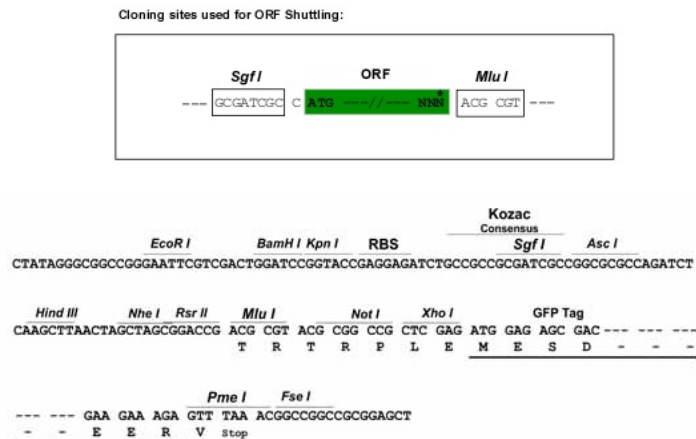
MSGFLGPLSRPGLPSAWLFLLLLGPSSVLGISFHLPVNSRKLREEIHKDLLVTGAYEITDQSGGAGGL
RTHLKITDSAGHILYAKEDATKGF AFTTEDYDMFEVCFESKGTGRIPDQLVILDMKHGVEAKNYEEIAK
VEKLPLEVELRRLLEDLSEIVNDFAYMKKREEEMRDTNESTNTRVL YFSIFSMFCLIGLATWQVFYLR
FFKAKKLIE

TRTRPLE - GFP Tag - V



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_026775

ORF Size: 657 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_026775.4](#), [NP_081051.1](#)

RefSeq Size: 3526 bp

RefSeq ORF: 660 bp

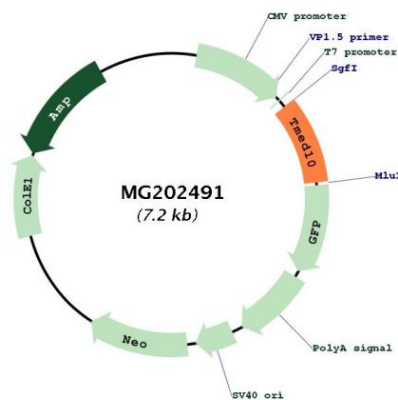
Locus ID: 68581

UniProt ID: [Q9D1D4](#)

Cytogenetics: 12 D2

Gene Summary: Involved in vesicular protein trafficking. Mainly functions in the early secretory pathway. Thought to act as cargo receptor at the luminal side for incorporation of secretory cargo molecules into transport vesicles and to be involved in vesicle coat formation at the cytoplasmic side. In COPII vesicle-mediated anterograde transport involved in the transport of GPI-anchored proteins and proposed to act together with TMED2 as their cargo receptor; the function specifically implies SEC24C and SEC24D of the COPII vesicle coat and lipid raft-like microdomains of the ER. Recognizes GPI anchors structural remodeled in the ER by PGAP1 and MPPE1. In COPI vesicle-mediated retrograde transport involved in the biogenesis of COPI vesicles and vesicle coat recruitment. On Golgi membranes, acts as primary receptor for ARF1-GDP which is involved in COPI-vesicle formation. Increases coatomer-dependent GTPase-activating activity of ARFGAP2. Involved in trafficking of G protein-coupled receptors (GPCRs). Regulates F2LR1, OPRM1 and P2RY4 exocytic trafficking from the Golgi to the plasma membrane thus contributing to receptor resensitization. Involved in trafficking of amyloid beta A4 protein and soluble APP-beta release (independent of modulation of gamma-secretase activity). As part of the presenilin-dependent gamma-secretase complex regulates gamma-cleavages of the amyloid beta A4 protein to yield amyloid-beta 40 (Abeta40). Involved in organization of the Golgi apparatus (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG202491