

## Product datasheet for **MG219427**

### **Tgm4 (NM\_177911) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Tgm4 (NM_177911) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tgm4
Synonyms:	9530008N10Rik; Eapa1; TGP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG219427 representing NM\_177911  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGACTCCAGGAATGTGCTTATCATTTACGCTGTGAATGTGGAGAGAAAGCTGAATGCTGCTGCCACC  
ACACATCCGAGTACCAGACCAAGAAGCTCGTGTGAGGCCGTGGACAGATTTCACTCTGAAGGTGATACT  
GAACCGACCTCTCCAACCTCAGGATGAGCTGAAGGTGACATTCACCTCCGGACAGAGAGACCCACCTAC  
ATGGTGGAGCTTGATCCAGTGACATCCTACCGTTCTAAGGGCTGGCAGGTGAAGATTGCCAAACAGTCTG  
GCGTAGAGGTTATTCTGAATGTCATCAGTGTGCTGACGCCGTAGTGGGAAGGTACAAGATGAGGGTGAA  
CGAGTATAAAGCTGGAGTATTCTACCTTCTTTCAATCCGTGGTGTCTCAGACGACAGTGTCTTCATGGCT  
AGTGAGGAAGAACGAGCAGAGTACATCCTAATGACACCCGGCTACATGTACATGGGTTTCGCCAAACAAA  
TTAAAGAGAAGCCCTGGACCTTTGGTCAGTTTGAGAAGCACATCCTGAGCTGTGCTTCACTTGTGTGT  
CCAGTTGGAGAACAATGAGATGCAGAACCAGTGTGTGTCCAGGGCCATCTGTACTATGATGTGTGCT  
GGGAACGGCGGAGTGTGATGGGAACTGGACAGGAGACTATGCCGATGGCACGGCCCCATATGTGTGGA  
CCAGCAGTGTACCCATCCTGCAGCAGCATTATGTCACCAGGATGCCTGTACGCTACGGCCAGTGTGGGT  
TTTCTCTGGAATCCTGACCACAGCACTGAGAGCAGTGGGTATCCCAGCTCGAAGCGTGACTAACTTTGAG  
TCAGCCCCATGATACAGAAAAGAACCTCACAGTAGACATCTACCTGGATGAATCGGGCAAGACAATCCAC  
ATCTGACCAAAGACTCTGTCTGGAATTTCCACGTGTGGACAGATGCCTGGATGAAAAGGCAGGATCTACC  
TCATGGCTATGATGGCTGGCAGGTCCTGGATTCTACACCCAGGAAATCAGCGATGGAGGCTTCCGCACC  
GGGCTTCACCACTGACTGCTATTCGCCAGGGATTGATCCAGATGAAGTATGACACCACGTTTGTGTTCA  
CGGAGGTCAATGGTGACAAGTTTATCTGGTTGGTGAAGCAGAACCAGAAAGGGAGAAGAATATTCTCAT  
CGCCGTGGAGACTGCCAGCATCGCAAGAAAATCAGCACCAGATGGTGGGCGAGAACAGGCGTGAAGAT  
ATAACCTTGCAGTACAAGTTCCAGAAAGCAGCCAGAGGAGAGGAAGGTCATGGCGAAGGCTTCTGGTA  
AACCTTCTGATGACAAGCTCAACTCTCGGACTCTGAACAACCTCTTTCAGATATCTGTCTCCAGAACTC  
GTTGGAGTTAGGAGCTCCCATCTATTTGACCATAACTTTGAAAAGAAAAACCGCCACCCACAGAATGTC  
AACATTTCTGCTCCCTCAACCTGCAGACATACACAGGCAACAAGAAGACAAACCTGGGAGTCATCCAGA  
AGACTGTGCAGATCCACGGCCAAGAATCAAGGGTGTTCCTCACCATGGATGCCAGCTACTACATCTATAA  
ACTGGCATGGTTGATGATGAGATGGTCATTGGAGGGTTCATCATTGCAGAAATGTAGATTCTGGTGAA  
AGGGTGGCCACTGATACAACCCTGTGTTTCTGTACTCTGCCTTCTCTGTAGAGATGCCAGCACAGGCA  
AGGTCAAGCAGCCTCTCGTCATCACCAGCAAATCAGCAACCCCTGCCATCCCTTTGACTAACATCAA  
GTTCTCAGTGGAAAGCCTGGGCCTCGCTAACATGAAATCCTGGGAACAAGAGACAGTGCCACCTGGAAAG  
ACCATCACTTTCCAAATGGAATGCACCCAGTGAAGCTGGACCCAGAAATTCATTGTCAAGTTTATTT  
CCAGACAAGTGAAGAGGTTTCATGCCGAGAAGGTCGTTTCTCATCAGCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG219427 representing NM\_177911  
 Red=Cloning site Green=Tags(s)

MDSRNVLIIYAVNVERKLNAAAHTSEYQTKKLVLRGQIFTLKIVLNRPLQPQDELKVFTTSGQRDP  
 MVELDPVTSYRSKGWQVKIAKQSGVEVILNVISAADAVVGRYKMRVNEYKAGVFYLLFNPWCSDDSVFMA  
 SEEERAELYLNDTGMYMGFAKQIKEPWTFFGQFEKHILSCCFNLLFQLENNEMQNPVLVSRAICTMMCA  
 ANGGVLMGNWTGDYADGTAPYVWTSSVPIQQHYVTRMPVRYGQCWVFSGILTTALRAVGIPARSVTNFE  
 SAHDTEKNLTVDIYLDSEKTIPIHLTKDSVWNFHVWTDAMMKRQDLPHGYDQWQVLDSTPQEI SDGGFRT  
 GPSPLTAIRQGLIQMKYDITTFVFTEVNGDKFIWLVKQNQEREKNILIAVETASIGKKISTKMGVGNRRED  
 ITLQYKFPEGSPEERKVMASGKPSDDKLNLSRLNNSLQISVLQNSLELGAPIYLTITLKRKTATPQNV  
 NISCSLNLQTYTGNKKTNLGVIQKTVQIHGQESRVFLTMDASYIYKLGMYDDEMIVGGFIIAEIVDSGE  
 RVATDTTLCFLYSAFSVEMPSTGKVKQPLVITSKFTNTLPIPLTNIKFSVESLGLANMKSWEQETVPPGK  
 TITFQMECTPVKAGPQKQKIVKFI SRQVKEVHAEKVVLISK

TRTRPLE - GFP Tag - V

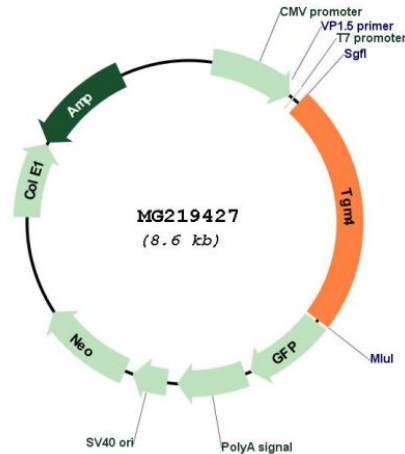
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_177911

**ORF Size:** 2010 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](mailto: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\\_177911.4](#), [NP\\_808579.2](#)

**RefSeq Size:** 2767 bp

**RefSeq ORF:** 2013 bp

**Locus ID:** 331046

**UniProt ID:** [Q8BZH1](#)

**Cytogenetics:** 9 F4

**Gene Summary:** Associated with the mammalian reproductive process. Plays an important role in the formation of the seminal coagulum through the cross-linking of specific proteins present in the seminal plasma. Transglutaminase is also required to stabilize the copulatory plug. [UniProtKB/Swiss-Prot Function]