

## Product datasheet for **MG203782**

### Tmem119 (NM\_146162) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Tmem119 (NM\_146162) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Tmem119  
**Synonyms:** AW208946; BC025600; obif  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG203782 representing NM\_146162  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTCCCCTGGTTCCTCCTGTCTCTGCTGCTACTTGGCAGGCCCTGTGCCTGGGGTGGCCTACTCTGTGT  
CACTCCCGGCCTCCTTCTGGAGGATGTAGCCGGCAGCGGGGAAGCTGAGGGTTCCTCAGCCTCTCCCC  
GAGCCTGCCGCCCTGGGACTCCAGCCTTCAGTCCCACACCGGAGAGACCCAGCCACAGCTCTGGAC  
GGCCCCGTGCCACCCACCAACCTCCTGGAAGGGATCATGGATTTCTTCCGGCAGTACGTGATGCTCATCG  
CGGTGGTGGGCTCGTGACCTTCTCATCATGTTTCATAGTCTGCGCCGCCCTCATCACGCCCAGAAGCA  
CAAGGCCACAGCCTACTACCCATCCTCGTTCCTGAAAAGAAGTATGTGGACCAGAGAGACCGGGCTGGG  
GGACCCCGTACCTTCAGCGAGGTCCCTGACAGGGCACCTGACAGCCGGCATGAAGAAGGCCCTGGACACCT  
CCCATCAGCTCCAGGCTGACATTCTGGCTGCTACCCAGAACCTCCGGTCTCCAGCTAGAGCCCTGCCAGG  
CAATGGGGAGGGAGCAAAGCCTGTGAAGGGTGGGTCCGAGGAGGAGGAGGAAGAGGTGCTCAGCGGTGAG  
GAGGAGGCCAGGAAGCCCCAGTATGTGGGGTCACTGAAGAGAAGCTGGGGTCCCAGAGGAGTCCGGTCT  
CAGCAGAGGCTGAAGGGTTCCTGCCACCAGTGAAGGGCAAGGGGAAGCAGAAGGGTCTTTCTCCTTAGC  
CCAGGAATCCCAGGGAGCAACTGGTCTCCTGAAAGTCCCTGTGCCTGCAACAGAGTCTCCCCAGTGTCT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG203782 representing NM\_146162  
 Red=Cloning site Green=Tags(s)

MVPWFLLSLLLLARVPVGVAYSVSLPASFLEDVAGSGEAGSSASSPSLPPPGTAFSPTPERPQPTALD  
 GPVPTNLLEGIMDFFRQYVMLIAVVGSLTFLIMFIVCAALITRQKHKATAYYPSFPEKKYVDQRDRAG  
 GPRTFSEVPDRAPDSRHEEGLDTSHLQADILAATQNLRSAPALPGNGEGAKPVKGGSEEEEEVLSGQ  
 EEAQEAPVCGVTEEKLGVPEESVSAEAEVGPATSEGQGEAGSFSLAQESQGATGPPEPCACNRVSPSV

TRTRPLE - GFP Tag - V

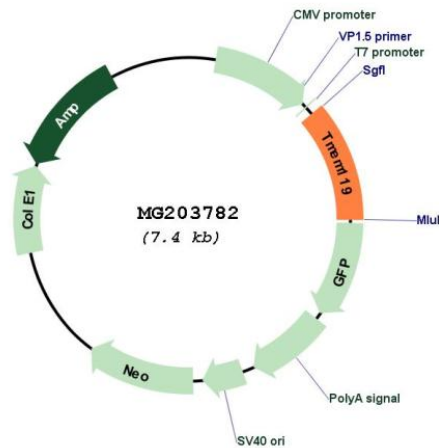
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**



**ACCN:** NM\_146162

**ORF Size:** 840 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_146162.3</a>
<b>RefSeq Size:</b>	2137 bp
<b>RefSeq ORF:</b>	843 bp
<b>Locus ID:</b>	231633
<b>UniProt ID:</b>	<a href="#">Q8R138</a>
<b>Cytogenetics:</b>	5 F
<b>Gene Summary:</b>	Plays an important role in bone formation and normal bone mineralization (PubMed:26207632, PubMed:22416756, PubMed:20025746). Promotes the differentiation of myoblasts into osteoblasts (PubMed:22416756, PubMed:20025746, PubMed:22579779). May induce the commitment and differentiation of myoblasts into osteoblasts through an enhancement of BMP2 production and interaction with the BMP-RUNX2 pathway (PubMed:21239498, PubMed:22579779). Upregulates the expression of ATF4 which plays a central role in osteoblast differentiation (PubMed:24362451). Essential for normal spermatogenesis and late testicular differentiation (PubMed:26207632).[UniProtKB/Swiss-Prot Function]