

## Product datasheet for **MG216360**

### Tmtc3 (NM\_001110013) Mouse Tagged ORF Clone

#### Product data:

<b>Product Type:</b>	Expression Plasmids
<b>Tag:</b>	TurboGFP
<b>Symbol:</b>	Tmtc3
<b>Synonyms:</b>	9130014E20Rik; B130008E12Rik; mSmile
<b>Mammalian Cell Selection:</b>	Neomycin
<b>Vector:</b>	pCMV6-AC-GFP (PS100010)
<b>E. coli Selection:</b>	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence: >MG216360 representing NM\_001110013  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCTTGAAGGGAAGATGGCTGATTAACCTCAAAGAAGTACTTTAATAGTCAGCGTGGTTGCCGCT  
GCTACTGGAACAGCCTGTTCTGTGGTTTTGTTTTGATGATGTTTCAGCAATATTGGATAATAAGACCT  
GCATCCATCTACACCTTAAAAAAGCTTATTTTTCAGAATGACTTCTGGGAACTCCTATGTCTGAGGAGAGA  
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CCATGTCTTACCACCTCCTGAACACAGTGTCCACGCTGTCGTGACGCTGATCTTCCCTAAGGTCTGCAG  
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GAAGAGATTGAACGATTTTTAAATGGAGAA

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG216360 representing NM\_001110013

Red=Cloning site Green=Tags(s)

MLEGMADINFKEVTLIVSVVAACYWNSLFCGFVDDVSAILDNKDLHPSTPLKTLFQNDFWGTPMSEER  
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 AVTGVVGRAELSSVFFLAAFLSYTKSGKPDNSIVWTPIVLTVFLVAVATLCKEQGITVVGICCVYEVFV  
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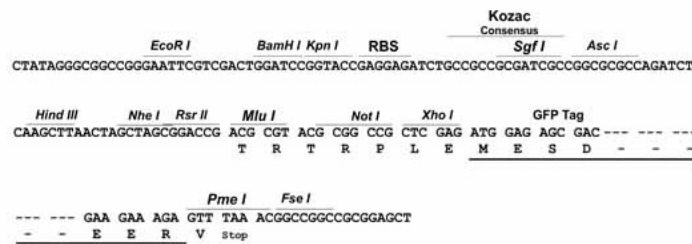
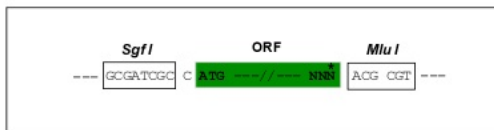
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

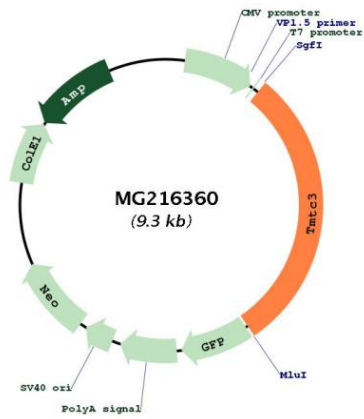
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



<b>ACCN:</b>	NM_001110013
<b>ORF Size:</b>	2760 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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001110013.1</a> , <a href="#">NP_001103483.1</a>
<b>RefSeq Size:</b>	5990 bp
<b>RefSeq ORF:</b>	2763 bp
<b>Locus ID:</b>	237500
<b>UniProt ID:</b>	<a href="#">Q8BRH0</a>
<b>Cytogenetics:</b>	10 D1
<b>Gene Summary:</b>	Transfers mannosyl residues to the hydroxyl group of serine or threonine residues. The 4 members of the TMTC family are O-mannosyl-transferases dedicated primarily to the cadherin superfamily, each member seems to have a distinct role in decorating the cadherin domains with O-linked mannose glycans at specific regions. Also acts as O-mannosyl-transferase on other proteins such as PDIA3. Involved in the positive regulation of proteasomal protein degradation in the endoplasmic reticulum (ER), and the control of ER stress response. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG216360