

## Product datasheet for **MG206618**

### **Psmc4 (NM\_011874) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Psmc4 (NM_011874) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Psmc4
Synonyms:	CIP21; MIP224
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG206618 representing NM_011874 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGAGATAGGCATTTTGGTGGAAAAGATTCCAGGATGAGATTCCAGCACTGTCCGTGTCTCGGCCG  
AGACCGGCTGTCTTTCTGGACCCGAACCTGAAGACCTGGAGGACCTGTACAGCCGCTACAAGAAGCT  
GCAGCAGGAGCTGGAGTCTCTGGAGGTGCAGGAGGAGTATATCAAGGACGAGCAGAAGAACCTGAAGAAG  
GAATTCCTCCACGCCAGGAGGAGTGAAGCGGATCCAGAGCATCCCCTGGTTCATCGGTGATTTCTTGG  
AAGCTGTGGATCAGAACACAGCCATCGTGGGCTCCACCACAGGCTCTAACTATTATGTGCGCATCCTGAG  
TACCATCGACCGGAGCTGCTCAAGCCCAACGCCTCGGTGGCCCTGCACAAGCACAGCAATGCCCTGGT  
GACGTGCTGCCTCCCAGGCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGCCAGATGTGATGT  
ATGCCGATATTGGAGGCATGGACATCCAGAAGCAGGAGGTGAGGGAGGCTGTGGAACCTCCCGCTTACACA  
CTTCGAGCTGTACAAGCAGATTGGCATCGATCCTCCCCGAGGTGTCTCATGTATGGCCCTCCTGGCTGT  
GGAAAGACAATGTTAGCAAAGGCTGTGGCACATCACACGACAGCTGCATTTATCCGTGTGGTGGGCTCGG  
AGTTTGTTCAGAAGTACCTGGGTGAGGGCCCCGGATGGTCCGGGATGTGTTCCGCTAGCTAAGGAGAA  
TGCACCTGCCATCATCTCATAGATGAAATTGATGCCATTGCCACCAAGAGATTTCGATGCCAGACAGGA  
GCTGACAGGGAGGTTTCAGAGGATCCTGCTGGAGCTACTGAATCAAATGGATGGATTTGACCAGAACGTCA  
ATGTGAAGGTAATCATGGCCACAACAGAGCAGACACCTTGGATCCAGCTCTACTGCGGCCAGGACGCCT  
GGACCGAAAAATTGAATCCCACTCCCTGACCGTCGCCAGAAGAGGTTGATTTTCTCCACCATCACCAGC  
AAAATGAACCTCTCTGAGGAGGTCGACCTGGAAGACTATGTGGCCGTCAGATAAGATTTTCAGGAGCCG  
ATATCAACTCCATCTGTGAGGAGTGAATGTTGGCTGTCCGTGAGAACCCTACATTGCTGCTGCCAA  
GGACTTCGAGAAAGCATAACAAGACCGTGATCAAGAAAGATGAACAGGAACATGAATTTTACAAG

**ACCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG206618 representing NM\_011874  
 Red=Cloning site Green=Tags(s)

MEEIGILVEKIQDEIPALSVSRPQTGLSFLGPEPEDELDYSRYKKLQQELEFLEVQEEYIKDEQKNLKK  
 EFLHAQEEVKRIQSIPLVIGQFLEAVDQNTAIVGSTTGSNYVVRILSTIDRELLKPNASVALHKHSNALV  
 DVLPEADSSIMMLTSDQKPDVMIYADIGGMDIQKQEVREAVELPLTHFELYKQIGIDPPRGVLMYGPFGC  
 GKTMLAKAVAHHTTAAFIRVVGSEFVQKYLGEQPRMVRDVFRLAKENAPAIIFIDEIDAIAIKRFDAQTG  
 ADREVQRILLELLNQMDGFDQNVNVKVIIMATNRADTLDPALLRPGRDRKIEFPLPDRRQKRLIFSTITS  
 KMNLSEEVLEDYVARPDKISGADINSICQESGMLAVRENRYIVLAKDFEKAYKTVIKKDEQEHEFYK

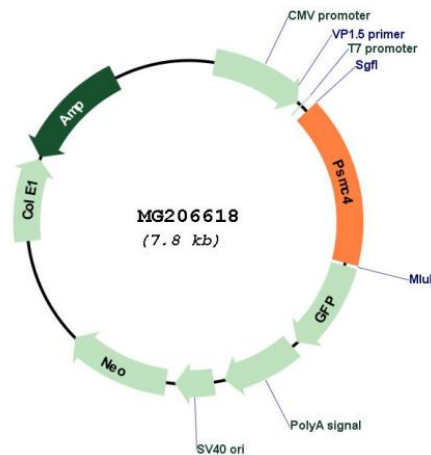
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_011874

<b>ORF Size:</b>	1254 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_011874.2</a> , <a href="#">NP_036004.2</a>
<b>RefSeq Size:</b>	1436 bp
<b>RefSeq ORF:</b>	1257 bp
<b>Locus ID:</b>	23996
<b>UniProt ID:</b>	<a href="#">P54775</a>
<b>Cytogenetics:</b>	7 16.11 cM
<b>Gene Summary:</b>	Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. PSMC4 belongs to the heterohexameric ring of AAA (ATPases associated with diverse cellular activities) proteins that unfolds ubiquitinated target proteins that are concurrently translocated into a proteolytic chamber and degraded into peptides.[UniProtKB/Swiss-Prot Function]