

## Product datasheet for **MG218061**

### Psme4 (NM\_134013) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Psme4 (NM_134013) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Psme4
Synonyms:	AA409398; AU041366; mKIAA0077; TEMO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218061 representing NM_134013 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGCTCCGGAGCGGGCGGGCGGGGAGCCCCGAGCCTGGCGGGCGGCCGCTACTGGGCCCGC  
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 CTTATGATGTTCTACCTGGATGCCCCAGCTCCTTATGAACCTCAGTGCACATTTGAATGATCCTCAGCC  
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 AAGCAGCAGTTCACTGATGACCAGCTGCTTGTCTCACTGACCTCCTTGTGTACCATGCATTATATGCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG218061 representing NM\_134013  
 Red=Cloning site Green=Tags(s)

MEAPERAGGGEPPEPGRPVLPRAFVPQKEIVYNKLLPYAERLDAESDLQLAQIKSNLGRAVQLQELWP  
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 GLAQQEWVPELLHRLKYLEPKLTQVYKNVRERIGSVLTYIFMIDVSLPNTAPTTPSPIPEFTARVLEK  
 LKPLTDVDEEIQNHVMEENGIGEEDERTQGIKLLKTKILKWL MASAGRSFSTAVKEQLQLLPLFFKIAPVE  
 NDNSYDELKRDAKLCLSMSQGLLYPQQVPLILQVLSQTARSSSWHARYTVLTYLQTMVFYNLFIFLNNE  
 DAVKDIRWLIICLLEDEQLEVREMAATL SGLLQCNFL TMSAMQIHFEQLCKTKLPKRRKRDPSVGD  
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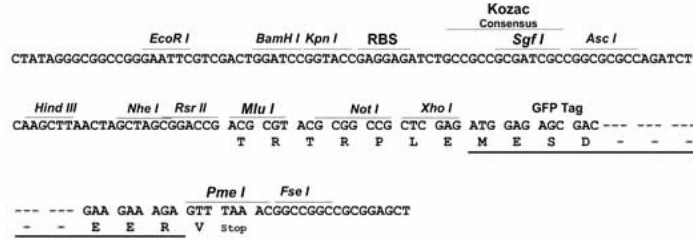
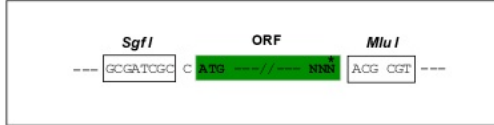
TRTRPLE - GFP Tag - V

**Restriction Sites:**

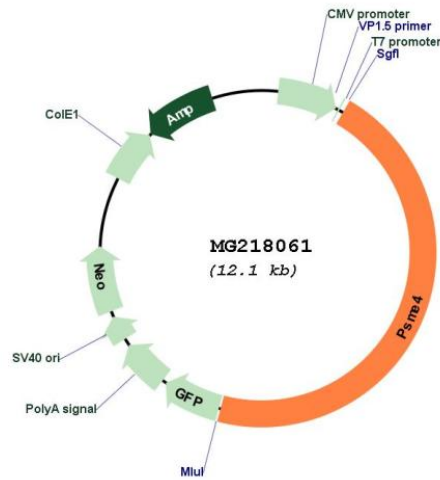
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_134013

ORF Size: 5529 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_134013.3</a> , <a href="#">NP_598774.2</a>
<b>RefSeq Size:</b>	6454 bp
<b>RefSeq ORF:</b>	5532 bp
<b>Locus ID:</b>	103554
<b>UniProt ID:</b>	<a href="#">Q5SSW2</a>
<b>Cytogenetics:</b>	11 A4
<b>Gene Summary:</b>	Associated component of the proteasome that specifically recognizes acetylated histones and promotes ATP- and ubiquitin-independent degradation of core histones during spermatogenesis and DNA damage response. Recognizes and binds acetylated histones via its bromodomain-like (BRDL) region and activates the proteasome by opening the gated channel for substrate entry. Binds to the core proteasome via its C-terminus, which occupies the same binding sites as the proteasomal ATPases, opening the closed structure of the proteasome via an active gating mechanism. Component of the spermatoproteasome, a form of the proteasome specifically found in testis: binds to acetylated histones and promotes degradation of histones, thereby participating actively to the exchange of histones during spermatogenesis. Also involved in DNA damage response in somatic cells, by promoting degradation of histones following DNA double-strand breaks.[UniProtKB/Swiss-Prot Function]