

## Product datasheet for **RG222312**

### PSME3 (NM\_176863) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PSME3 (NM_176863) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PSME3
Synonyms:	HEL-S-283; Ki; PA28-gamma; PA28G; PA28gamma; REG-GAMMA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222312 representing NM_176863 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTCGTTGCTGAAGGTGGATCAGGAAGTGAAGCTCAAGGTTGATTCTTTCAGGGAGCGGATCACAA  
GTGAGGCAGAAGACTTGGTGGCAAATTTTTCCCAAAGAAGTTATTAGAAGTTGATAGTTTTCTGAAGGA  
ACCAATCTTAAACATCCATGACCTAACTCAGATCCACTCTGACATGAATCTCCAGTCCCTGACCCATT  
CTTCTACCAATAGCCATGATGGACTGGATGGTCCCACTATAAGAAGCGAAGGTTGGATGAGTGTGAAG  
AAGCCTTCCAAGGAACCAAGGTGTTGTGATGCCCAATGGGATGCTGAAAAGCAACCAGCAGCTGGTGGA  
CATTATTGAGAAAAGTGAACCTGAGATCCGGCTGTTGATTGAGAAATGTAAACACGCCTTCAGGCAAAGGT  
CCTCATATATGTTTTGACCTCCAGGTCAAATGTGGGTACAGCTCCTGATTCCCAGGATAGAAGATGGAA  
ACAACCTTGGGGTGTCCATTGAGGAGGAAACAGTTGCAGAGCTAAGAAGTGTGAGAGTGAAGCTGCATC  
TTATCTGGACCAGATTTCTAGATATTATATTACAAGAGCCAAATGGTTTCTAAAATAGCTAAAATATCCC  
CATGTGGAGGACTATCGCCGCACCGTGACAGAGATTGATGAGAAAAGAATATCAGCCTTCGGCTCATCA  
TATCAGAGCTGAGGAATCAATATGTCACCTCATGACATGATCCTGAAAAATATCGAGAAGATCAAACG  
GCCCGGAGCAGCAATGCAGAGACTCTGTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG222312 representing NM\_176863  
 Red=Cloning site Green=Tags(s)

MASLLKVDQEVKLVDSFRERITSEAEDLVANFFPKLLELDSFLKEPILNIHDLTQIHSMDNLPVPDPI  
 LLTNSHDGLDGPITYKKRRRLDECEEFQGTKVFVMPNGMLKSNQQLVDIEKVKPEIRLLIEKCNTPSGKG  
 PHICFDLQVKMWVQLLIPRIEDGNFVSVIQEETVAELRTVESEAASYLDQISRYITRAKLVSKIAYKP  
 HVEDYRRTVTEIDEKEYISLRLIISELRNQYVTLHDMILKNIEIKRPRSSNAETLY

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_176863

**ORF Size:** 801 bp

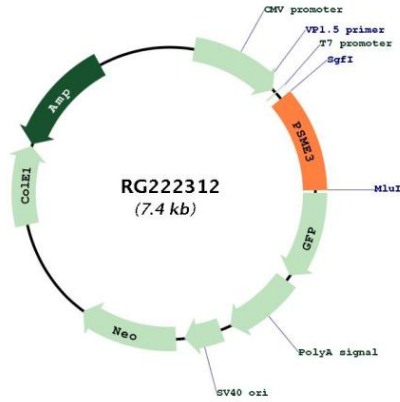
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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.

<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_176863.3</a>
<b>RefSeq Size:</b>	3228 bp
<b>RefSeq ORF:</b>	804 bp
<b>Locus ID:</b>	10197
<b>UniProt ID:</b>	<a href="#">P61289</a>
<b>Cytogenetics:</b>	17q21.31
<b>Protein Families:</b>	Stem cell - Pluripotency
<b>Protein Pathways:</b>	Antigen processing and presentation, Proteasome
<b>Gene Summary:</b>	<p>The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. The immunoproteasome contains an alternate regulator, referred to as the 11S regulator or PA28, that replaces the 19S regulator. Three subunits (alpha, beta and gamma) of the 11S regulator have been identified. This gene encodes the gamma subunit of the 11S regulator. Six gamma subunits combine to form a homohexameric ring. Alternate splicing results in multiple transcript variants. [provided by RefSeq, May 2012]</p>

Product images:



Circular map for RG222312