

Product datasheet for **RG232329**

PSME3 (NM_001267045) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSME3 (NM_001267045) 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:	>RG232329 representing NM_001267045 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAAATGGATCCTCAAAAAATAAAGTATTTGCAGTCTGGGGCCTCTCAGCTTCTTATTACAGTT
ACAAGTTGATTCTTTCAGGGAGCGGATCACAAGTGAGGCAGAAGACTTGGTGGCAAATTTTTCCAAA
GAAGTTATTAGAACTTGATAGTTTTCTGAAGGAACCAATCTTAAACATCCATGACCTAACTCAGATCCAC
TCTGACATGAATCTCCAGTCCCTGACCCATTCTTCTACCAATAGCCATGATGGACTGGATGGTCCCA
CTTATAAGAAGCGAAGGTTGGATGAGTGTGAAGAAGCCTTCCAAGGAACCAAGGTGTTTGTGATGCCAA
TGGGATGCTGAAAAGCAACCAGCAGCTGGTGGACATTATTGAGAAAGTAAACCTGAGATCCGGCTGTTG
ATTGAGAAATGTAACACGGTCAAAATGTGGGTACAGCTCCTGATTCACAGGATAGAAGATGGAAACAACT
TTGGGGTGTCCATTTCAGGAGGAAACAGTTGCAGAGCTAAGAACTGTTGAGAGTGAAGCTGCATCTTATCT
GGACCAGATTTCTAGATATTATATTACAAGAGCCAAATGGTTTCTAAAAAGCTAAATATCCCCATGTG
GAGGACTATCGCCGCACCGTGACAGAGATTGATGAGAAAGAATATATCAGCCTTCGGTCCATCATATCAG
AGCTGAGGAATCAATATGCTACTACATGACATGATCCTGAAAAATATCGAGAAGATCAAACGGCCCCG
GAGCAGCAATGCAGAGACTCTGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG232329 representing NM_001267045
 Red=Cloning site Green=Tags(s)

MEKWILKKIKYLQSGGLSASYYSYKVDSEFRERITSEAEDLVANFFPKLLEDSFLKEPILNIHDLTQIH
 SDMNLPPDPILLTNSHDGLDGPITYKKRRLDECEAFQGTKVFMVPMGMLKSNQQLVDIIEKVKPEIRLL
 IEKCNTVKMWWQLLIPRIEDGNFVGSIQEETVAELRTVESEAASYLDQISRYIITRAKLVSKIAPHY
 EDYRRTVTEIDEKEYISLRLIISELRNQVYVTLHDMILKNIEKIKRPRSSNAETLY

TRTRPLE - GFP Tag - V

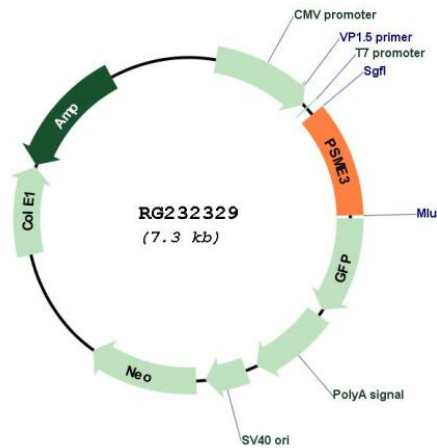
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001267045

ORF Size: 795 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 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.

Components: 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).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

RefSeq: [NM_001267045.2](#)

RefSeq Size: 3782 bp

RefSeq ORF: 798 bp

Locus ID: 10197

Cytogenetics: 17q21.31

Protein Families: Stem cell - Pluripotency

Protein Pathways: Antigen processing and presentation, Proteasome

Gene Summary:

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]