

Product datasheet for **RG236219**

Proteasome subunit alpha type 6 (PSMA6) (NM_001282233) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Proteasome subunit alpha type 6 (PSMA6) (NM_001282233) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PSMA6
Synonyms: IOTA; p27K; PROS27
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG236219 representing NM_001282233.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGACCGGAATGACAGCTGACAGCAGATCCCAGGTACAGAGGGCAGCCTATGAGGCAGCTAACTGGAAA
TACAAGTATGGCTATGAGATTCTGTGGACATGCTGTGTAAGAATTGCCGATATTTCTCAGGTCTAC
ACACAGAATGCTGAAATGAGGCCTCTGGTTGTTGTATGATTTAATTGGTATAGATGAAGAGCAAGGC
CCTCAGGTATATAAGTGTATCCTGCAGGTTACTACTGTGGGTTAAAGCCACTGCAGCGGGAGTTAAA
CAAAGTGAAGTCAACCAGCTTCTTGAAGAAAAAGTGAAGAAGAAATTTGATTGGACATTTGAACAGACA
GTGGAAACTGCAATTACATGCCTGTCTACTGTTCTATCAATTGATTTCAAACCTCAGAAATAGAAGTT
GGAGTAGTGACAGTTGAAATCCTAAATTCAGGATTCTTACAGAAGCAGAGATTGATGCTCACCTTGT
GCTCTAGCAGAGAGAGAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236219
Blue=ORF Red=Cloning site Green=Tag(s)

```
MTGMTADSRVQVQRARYEAAANWKYKYGYEIPVDMLCKRIADISQVYTQNAEMRPLGCCMILIGIDEEQG
PQVYKCDPAGYYCGFKATAAGVKQTESTSFLEKKVKKKFDWTFEQTVETAITCLSTVLSIDFKPSEIEV
GVVTVENPKFRILTEAIDAHLVALAERD
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPYSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: Sgfl-MluI

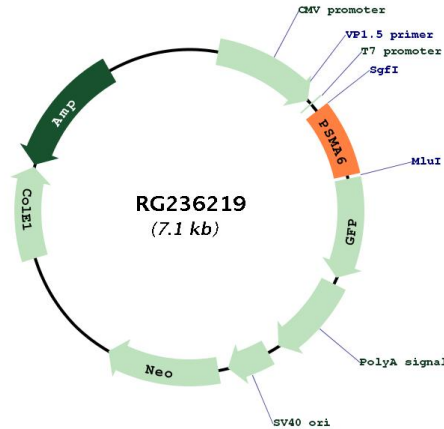


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001282233

ORF Size: 501 bp

OTI Disclaimer: 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).
RefSeq:	NM_001282233.1 , NP_001269162.1
RefSeq Size:	996 bp
RefSeq ORF:	504 bp
Locus ID:	5687
UniProt ID:	P60900
Cytogenetics:	14q13.2
Protein Families:	Druggable Genome, Protease, Stem cell - Pluripotency
Protein Pathways:	Proteasome
MW:	19.3 kDa
Gene Summary:	<p>The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure 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. 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. This gene encodes a member of the peptidase T1A family, that is a 20S core alpha subunit. Multiple transcript variants encoding several different isoforms have been found for this gene. A pseudogene has been identified on the Y chromosome. [provided by RefSeq, Aug 2013]</p>