

## Product datasheet for **RG201169**

### PSMA7 (NM\_002792) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PSMA7 (NM_002792) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PSMA7
Synonyms:	C6; HEL-S-276; HSPC; RC6-1; XAPC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201169 representing NM_002792 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCTACGACCGCCATCACCGTCTTCTCGCCGACGGCCACCTCTCCAAGTGGAGTACGCGCAGG  
AGGCCGTCAGAAGGGCTCGACCGGTTGGTGTTCGAGGAAGAGACATTGTTGTTCTTGGTGTGGAGAA  
GAAGTCAGTGGCCAACTGCAGGATGAAAGAACAGTGCAGGAGATCTGTGCTTTGGATGACAACGTCTGC  
ATGGCCTTTCAGGCCTCACCGCGATGCAAGGATAGTCATCAACAGGGCCCGGGTGGAGTGCCAGAGCC  
ACCGGCTGACTGTGGAGGACCCGGTCACTGTGGAGTACATCACCCGCTACATCGCCAGTCTGAAGCAGCG  
TTATACGCAGAGCAATGGGCGCAGGCCGTTTGGCATCTCTGCCCTCATCGTGGGTTTCGACTTTGATGGC  
ACTCCTAGGCTCTATCAGACTGACCCCTCGGGCACATACCATGCCTGGAAGGCCAATGCCATAGGCCGGG  
GTGCCAAGTCAGTGCCTGAGTTCCTGGAGAAGAACTATACTGACGAAGCCATTGAAACAGATGATCTGAC  
CATTAAGCTGGTATCAAGGCACTCCTGGAAGTGGTTCAGTCAGGTGGCAAAAACATTGAACTTGCTGTC  
ATGAGGCGAGATCAATCCCTCAAGATTTAAATCCTGAAGAAATTGAGAAGTATGTTGCTGAAATTGAAA  
AAGAAAAAGAAGAAAACGAAAAGAAGAAACAAAAGAAAGCATCA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG201169 representing NM\_002792  
Red=Cloning site Green=Tags(s)

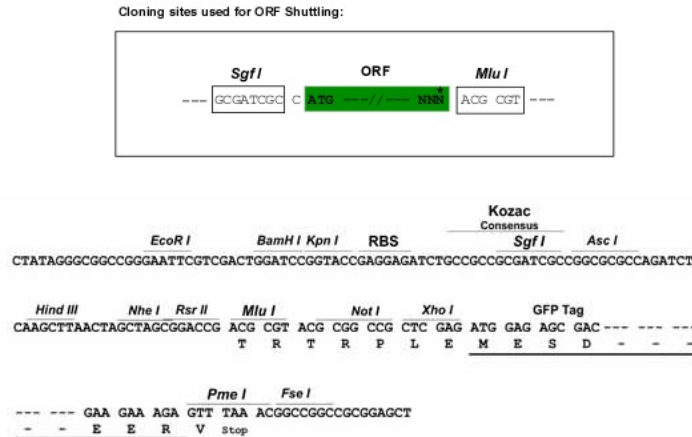
MSYDRAITVFPDGHFLQVEYAQEA VKKGGSTAVGVRGRDIVVLGVEKKSVAKLQDERTVRKICALDDNVC  
 MAFAGLTADARIVINRARVEQC SHRLTVEDPVTVEYITRYIASLQRYTQSNRRPFGISALIVGFDFDG  
 TPRLYQTDPSGTYHAWKANAI GRGAKSVREFLEKNYTDEAIETDDLTIKLVIKALLEVVQSGGKNIELAV  
 MRRDQSLKILNPEEIEKYVAEIEKEKEENEKQKKAS

TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1805\\_a03.zip](https://cdn.origene.com/chromatograms/ja1805_a03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002792

**ORF Size:** 744 bp

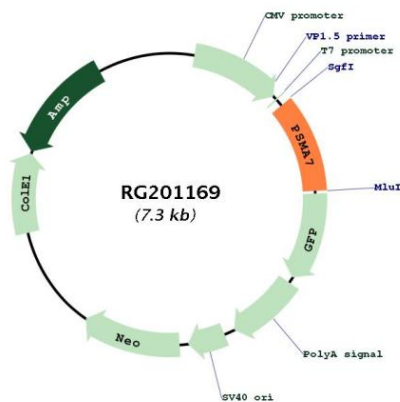
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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>	<u><a href="#">NM_002792.2</a></u> , <u><a href="#">NP_002783.1</a></u>
<b>RefSeq Size:</b>	984 bp
<b>RefSeq ORF:</b>	747 bp
<b>Locus ID:</b>	5688
<b>UniProt ID:</b>	<u><a href="#">O14818</a></u>
<b>Cytogenetics:</b>	20q13.33
<b>Domains:</b>	proteasome
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	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. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. This gene encodes a member of the peptidase T1A family that functions as a 20S core alpha subunit. The encoded protein interacts with the hepatitis B virus X protein and plays a role in regulating hepatitis C virus internal ribosome entry site (IRES) activity, an activity essential for viral replication. The encoded protein also plays a role in the cellular stress response by regulating hypoxia-inducible factor-1alpha. A pseudogene of this gene is located on the long arm of chromosome 9. [provided by RefSeq, Jul 2012]</p>

Product images:



Circular map for RG201169