

Product datasheet for **RG209976**

Proteasome subunit alpha type 6 (PSMA6) (NM_002791) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Proteasome subunit alpha type 6 (PSMA6) (NM_002791) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Proteasome subunit alpha type 6
Synonyms:	IOTA; p27K; PROS27
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209976 representing NM_002791 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCCGTGGTCCAGCGCCGGTTTTGACCGCCACATTACCATTTTTTCACCCGAGGGTCGGCTCTACC
AAGTAGAATATGCTTTTAAGGCTATTAACCAGGGTGGCCTTACATCAGTAGCTGTCAGAGGGAAAGACTG
TGCAGTAATTGCACACAGAAGAAAGTACCTGACAAATTATTGGATTCCAGCACAGTGACTCACTTATTC
AAGATAACTGAAAACATTGGTTGTGTGATGACCGGAATGACAGCTGACAGCAGATCCAGGTACAGAGGG
CACGCTATGAGGCAGCTAACTGAAAATACAAGTATGGCTATGAGATTCCTGTGGACATGCTGTGTAAG
AATTGCCGATATTCTCAGGTCTACACACAGAATGCTGAAATGAGGCCTCTTGGTTGTTGTATGATTTTA
ATTGGTATAGATGAAGAGCAAGGCCCTCAGGTATATAAGTGTGATCCTGCAGGTTACTACTGTGGGTTTA
AAGCCACTGCAGCGGGAGTTAAACAAACTGAGTCAACCAGCTTCCTTGAAAAAAGTGAAGAAGAAATT
TGATTGGACATTTGAACAGACAGTGAAACTGCAATTACATGCCTGTCTACTGTTCTATCAATTGATTTT
AAACCTTCAGAAATAGAAGTTGGAGTAGTGACAGTTGAAAATCCTAAATTCAGGATTCCTACAGAAGCAG
AGATTGATGCTCACCTTGTGCTCTAGCAGAGAGAGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG209976 representing NM_002791
 Red=Cloning site Green=Tags(s)

MSRGSSAGFDRHITIFSPEGRLYQVEYAFKAINQGLTSAVVRGKDCAVIVTQKKVPDKLLDSSTVTHLF
 KITENIGCVMTGMTADSRSQVQRARYEAAWVKYKGYEIPVDMLCKRIADISQVYTQNAEMRPLGCCMIL
 IGIDEEQGPQVYKCDPAGYYCGFKATAAGVKQTESTSFLEKKVKKKFDWTFEQTVETAITCLSTVLSIDF
 KPSEIEVGVVTVENPKFRILTEAIDAHLVALAERD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002791

ORF Size: 738 bp

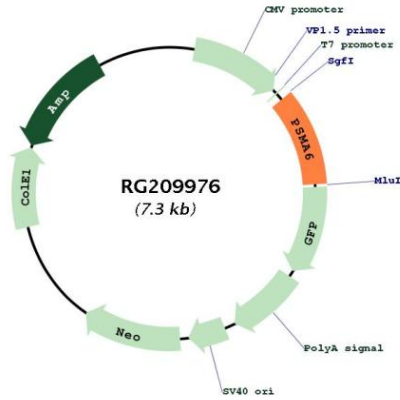
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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).

Reconstitution Method:	<ol style="list-style-type: none">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_002791.3
RefSeq Size:	1035 bp
RefSeq ORF:	741 bp
Locus ID:	5687
UniProt ID:	P60900
Cytogenetics:	14q13.2
Domains:	proteasome
Protein Families:	Druggable Genome, Protease, Stem cell - Pluripotency
Protein Pathways:	Proteasome
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>

Product images:



Circular map for RG209976