

Product datasheet for RC236219

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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: Myc-DDK
Symbol: PSMA6

Synonyms: IOTA; p27K; PROS27

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC236219 representing NM_001282233
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236219 representing NM_001282233

Red=Cloning site Green=Tags(s)

MTGMTADSRSQVQRARYEAANWKYKYGYEIPVDMLCKRIADISQVYTQNAEMRPLGCCMILIGIDEEQGP QVYKCDPAGYYCGFKATAAGVKQTESTSFLEKKVKKKFDWTFEQTVETAITCLSTVLSIDFKPSEIEVGV

VTVENPKFRILTEAEIDAHLVALAERD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

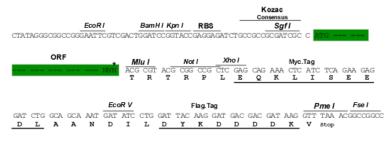
Restriction Sites: Sgfl-Mlul





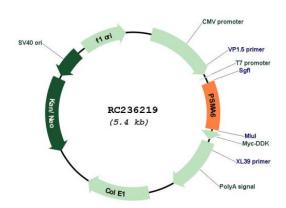
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

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.



Proteasome subunit alpha type 6 (PSMA6) (NM_001282233) Human Tagged ORF Clone – RC236219

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: <u>NM 001282233.1</u>, <u>NP 001269162.1</u>

 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: 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]