

Product datasheet for SC334618

OriGene Technologies, Inc.

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Proteasome subunit alpha type 6 (PSMA6) (NM_001282234) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Proteasome subunit alpha type 6 (PSMA6) (NM_001282234) Human Untagged Clone

Tag: Tag Free
Symbol: PSMA6

Synonyms: IOTA; p27K; PROS27

Mammalian Cell

Neomycin

Selection:

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

Fully Sequenced ORF: >NCBI ORF sequence for NM_001282234, the custom clone sequence may differ by one or

more nucleotides

Restriction Sites: Sgfl-Mlul

ACCN: NM 001282234

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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 001282234.1</u>, <u>NP 001269163.1</u>

 RefSeq Size:
 1016 bp

 RefSeq ORF:
 684 bp

 Locus ID:
 5687

 UniProt ID:
 P60900

 Cytogenetics:
 14q13.2

Protein Families: Druggable Genome, Protease, Stem cell - Pluripotency

Protein Pathways: Proteasome

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]

Transcript Variant: This variant (4) has an alternate first exon compared to variant 1. The resulting isoform (c) has a shorter and distinct N-terminus compared to isoform a.