

# **Product datasheet for RC201251L1**

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OriGene Technologies, Inc.

## PSMC5 (NM\_002805) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** PSMC5 (NM\_002805) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: PSMC5

Synonyms: p45; p45/SUG; RPT6; S8; SUG-1; SUG1; TBP10; TRIP1

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC201251).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM\_002805

ORF Size: 1218 bp





#### PSMC5 (NM\_002805) Human Tagged Lenti ORF Clone - RC201251L1

**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:** 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.

17q23.3

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 002805.4</u>

**RefSeq Size:** 1372 bp

**RefSeq ORF:** 1221 bp

**Locus ID:** 5705

UniProt ID: P62195

Cytogenetics:

Domains: AAA, AAA

**Protein Families:** Druggable Genome

**Protein Pathways:** Proteasome

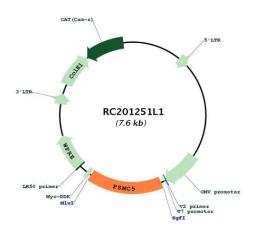
**MW:** 45.6 kDa



#### **Gene Summary:**

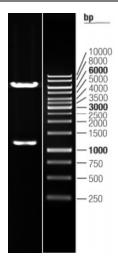
The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase 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 one of the ATPase subunits, a member of the triple-A family of ATPases which have a chaperone-like activity. In addition to participation in proteasome functions, this subunit may participate in transcriptional regulation since it has been shown to interact with the thyroid hormone receptor and retinoid X receptor-alpha. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2010]

### **Product images:**



Circular map for RC201251L1





Double digestion of RC201251L1 using Sgfl and Mlul  $\,$