

## Product datasheet for RC201810L4V

## OriGene Technologies, Inc.

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## S4 (PSMC1) (NM\_002802) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: S4 (PSMC1) (NM 002802) Human Tagged ORF Clone Lentiviral Particle

Symbol: S4

**Synonyms:** P26S4; p56; RPT2; S4

**Mammalian Cell** 

Cell Pur

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_002802 **ORF Size:** 1320 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC201810).

Sequence:

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.

**RefSeg:** NM 002802.2

 RefSeq Size:
 1586 bp

 RefSeq ORF:
 1323 bp

 Locus ID:
 5700

 UniProt ID:
 P62191

Cytogenetics: 14q32.11

Domains: AAA, AAA

**Protein Pathways:** Proteasome





**MW:** 49.2 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. This subunit and a 20S core alpha subunit interact specifically with the hepatitis B virus X protein, a protein critical to viral replication. This subunit also interacts with the adenovirus E1A protein and this interaction alters the activity of the proteasome. Finally, this subunit interacts with ataxin-7, suggesting a role for the proteasome in the development of spinocerebellar ataxia type 7, a progressive neurodegenerative disorder. [provided by RefSeq, Jul 2008]