

## Product datasheet for TP301810L

## OriGene Technologies, Inc.

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## S4 (PSMC1) (NM\_002802) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human proteasome (prosome, macropain) 26S subunit, ATPase, 1

(PSMC1), 1 mg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC201810 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MGQSQSGGHGPGGGKKDDKDKKKKYEPPVPTRVGKKKKKTKGPDAASKLPLVTPHTQCRLKLLKLERIKD YLLMEEEFIRNQEQMKPLEEKQEEERSKVDDLRGTPMSVGTLEEIIDDNHAIVSTSVGSEHYVSILSFVD KDLLEPGCSVLLNHKVHAVIGVLMDDTDPLVTVMKVEKAPQETYADIGGLDNQIQEIKESVELPLTHPEY YEEMGIKPPKGVILYGPPGTGKTLLAKAVANQTSATFLRVVGSELIQKYLGDGPKLVRELFRVAEEHAPS IVFIDEIDAIGTKRYDSNSGGEREIQRTMLELLNQLDGFDSRGDVKVIMATNRIETLDPALIRPGRIDRK IEFPLPDEKTKKRIFQIHTSRMTLADDVTLDDLIMAKDDLSGADIKAICTEAGLMALRERRMKVTNEDFK

KSKENVLYKKQEGTPEGLYL

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK

**Predicted MW:** 49 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.





RefSeq: NP 002793

Locus ID: 5700

UniProt ID: P62191, Q53XL8

RefSeg Size: 1586

Cytogenetics: 14q32.11

RefSeq ORF: 1320

Synonyms: P26S4; p56; RPT2; S4

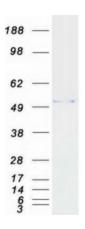
**Summary:** The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure

> 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]

**Protein Pathways:** Proteasome

## **Product images:**



Coomassie blue staining of purified PSMC1 protein (Cat# [TP301810]). The protein was produced from HEK293T cells transfected with PSMC1 cDNA clone (Cat# [RC201810]) using MegaTran 2.0 (Cat# [TT210002]).