

Product datasheet for PH301810

OriGene Technologies, Inc.

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S4 (PSMC1) (NM 002802) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: PSMC1 MS Standard C13 and N15-labeled recombinant protein (NP_002793)

Species: Human **HEK293 Expression Host: Expression cDNA Clone**

or AA Sequence:

RC201810

Predicted MW: 49.2 kDa

>RC201810 protein sequence **Protein Sequence:**

Red=Cloning site Green=Tags(s)

MGQSQSGGHGPGGGKKDDKDKKKKYEPPVPTRVGKKKKKTKGPDAASKLPLVTPHTQCRLKLLKLERIKD YLLMEEEFIRNQEQMKPLEEKQEEERSKVDDLRGTPMSVGTLEEIIDDNHAIVSTSVGSEHYVSILSFVD KDLLEPGCSVLLNHKVHAVIGVLMDDTDPLVTVMKVEKAPQETYADIGGLDNQIQEIKESVELPLTHPEY YEEMGIKPPKGVILYGPPGTGKTLLAKAVANQTSATFLRVVGSELIQKYLGDGPKLVRELFRVAEEHAPS IVFIDEIDAIGTKRYDSNSGGEREIQRTMLELLNQLDGFDSRGDVKVIMATNRIETLDPALIRPGRIDRK IEFPLPDEKTKKRIFQIHTSRMTLADDVTLDDLIMAKDDLSGADIKAICTEAGLMALRERRMKVTNEDFK

KSKENVLYKKQEGTPEGLYL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-Myc/DDK Tag:

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

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

Labeling Method: Labeled with [U-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 002793

RefSeg Size: 1586 RefSeq ORF: 1320

Synonyms: P26S4; p56; RPT2; S4





Locus ID: 5700

UniProt ID: <u>P62191</u>, <u>Q53XL8</u>

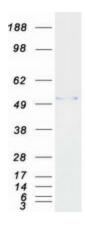
Cytogenetics: 14q32.11

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]).