

Product datasheet for PH301810

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
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC201810
Predicted MW:	49.2 kDa
Protein Sequence:	>RC201810 protein sequence Red=Cloning site Green=Tags(s)

MGQSQSGGHGPGGGKKDDKDKKKKYEPVPTRVGKKKKTKGPDAAASKLPLVTPHTQCRLKLLKLERIKD
YLLMEEEFIRNQEOMKPLEEKQEEERSKVDDLRTGTPMSVGTLEEIIDDNHAIVSTSVGSEHYVSILSFVD
KDILLEPGCSVLLNHKVHAVIGVLMDDTDPLVTVMKVEKAPQETYADIGGLDNQIQEIKESVELPLTHPEY
YEEMGIKPPKGVILYGPPGTGKTLAKAVANQTSATFLRVVGSSELIQKYLGDGPKLVRELFRVAEEHAPS
IVFIDEIDAIGTKRYDSNSGGEREIQRMLELLNQLDGFDSRGDVKVMATNRIETLDPALIRPGRIDRK
IEFPLPDEKTKKRIFQIHTSRMTLADDVTLDDLIMAKDDL SGADIKAICTEAGLMALRERRMKVTNEDFK
KSKENVLYKKQEGTPEGLYL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
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- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_002793</u>
RefSeq Size:	1586
RefSeq ORF:	1320
Synonyms:	P26S4; p56; RPT2; S4



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Locus ID: 5700

UniProt ID: [P62191](#), [Q53XL8](#)

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]).