



# Recombinant Human 26S protease regulatory subunit 4 (PSMC1)

<b>Product Code</b>	CSB-EP018888HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P62191
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	GQSQSGGHG PGGGKKDDKD KKKKYEPPVP TRVGKKKKKT KGPDAASKLP LVTPTHQCRLL KLLKLERIKD YLLMEEEFIR NQEQMKPLEE KQEEERSKVD DLRGTPMSVG TLEEIIDDNH AIVSTSVGSE HYVSILSFVD KDLLEPGCSV LLNHKVHAVI GVLMDTDPL VTVMKVEKAP QETYADIGGL DNQIQEIKES VELPLTHPEY YEEMGIKPPK GVILYGGPGT GKTLLAKAVA NQTSATFLRV VGSELIQKYL GDGPKLVREL FRVAEEHAPS IVFIDEIDAI GTKRYDSNSG GEREIQRML ELLNQLDGFDF SRGDVKVIMA TNRIETLDPALIRPGRIDRK IEFPLPDEKT KKRIFQIHST RMTLADDVTL DDLIMAKDDL SGADIKAICT EAGLMALRER RMKVTNEDFK KSKENVLYKK QEGTPEGLYL
<b>Source</b>	E.coli
<b>Target Names</b>	PSMC1
<b>Protein Names</b>	Recommended name: 26S protease regulatory subunit 4 Short name= P26s4 Alternative name(s): 26S proteasome AAA-ATPase subunit RPT2 Proteasome 26S subunit ATPase 1
<b>Expression Region</b>	2-440
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.