



# Recombinant Human Proteasome subunit alpha type-7 (PSMA7)

<b>Product Code</b>	CSB-EP018873HU-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	O14818
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MSYDRAITVF SPDGHLFQVE YAQEAVKKGS TAVGVRGRDI VVLGVEKKS AKLQDERTVR KICALDDNVC MAFAGLTADA RIVINRARVE CQSHRLTVED PVTVEYITRY IASLKQRYTQ SNGRRPFGIS ALIVGFDFDG TPRLYQTDP S GTYHAWKANA IGRGAKSVRE FLEKNYTDEA IETDDLTIKL VIKALLEVVQ SGGKNIELAV MRRDQSLKIL NPEEIEKYVA EIEKEKEENE KKKQKKAS
<b>Source</b>	E.coli
<b>Target Names</b>	PSMA7
<b>Protein Names</b>	Recommended name: Proteasome subunit alpha type-7 EC= 3.4.25.1 Alternative name(s): Proteasome subunit RC6-1 Proteasome subunit XAPC7
<b>Expression Region</b>	1-248
<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 protein
<b>Target Details</b>	The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure 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. 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 a member of the peptidase T1A family, that is a 20S core alpha subunit. This particular subunit has been shown to interact specifically with the hepatitis B virus X protein, a protein critical to viral replication. In addition, this subunit is involved in regulating hepatitis virus C internal ribosome entry site (IRES) activity, an activity essential for viral replication. This core alpha subunit is also involved in regulating the hypoxia-inducible factor-1alpha, a transcription factor important for cellular responses to oxygen tension. Multiple isoforms of this subunit arising from alternative splicing may exist but alternative transcripts for only two isoforms have been defined. A pseudogene has been identified on chromosome 9.



---

**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.

---

**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.