



Recombinant Human Proteasome subunit alpha type-7 (PSMA7)

Product Code	CSB-MP018873HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	O14818
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	MSYDRAITVF SPDGHLFQVE YAQEAVKKGS TAVGVRGRDI VVLGVEKKS AKLQDERTVR KICALDDNVC MAFAGLTADA RIVINRARVE CQSHRLTVED PVTVEYITRY IASLKQRYTQ SNGRRPFGIS ALIVGFDFDG TPRLYQTDPS GTYHAWKANA IGRGAKSVRE FLEKNYTDEA IETDDLTIKL VIKALLEVVQ SGGKNIELAV MRRDQSLKIL NPEEIEKYVA EIEKEKEENE KKKQKKAS
Source	Mammalian cell
Target Names	PSMA7
Protein Names	Recommended name: Proteasome subunit alpha type-7 EC= 3.4.25.1 Alternative name(s): Proteasome subunit RC6-1 Proteasome subunit XAPC7
Expression Region	1-248
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full length protein
Target Details	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.