



Recombinant Mouse Proteasome activator complex subunit 1 (Psme1)

Product Code	CSB-MP018915MO
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P97371
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	>85% (SDS-PAGE)
Sequence	MATLRVHPEA QAKVDVFRED LCSKTENLLG SYFPPKISEL DAFLKEPALN EANLSNLKAP LDIPVPDPVK EKEKEERKKQ QEKEEKEEK KGDEDDKGGP CGPVNCNEKI VLLQLRKPE IKDVTEQLNL VTTWLQLQIP RIEDGNNFGV AVQEKV FELM TNLHTKLEGF HTQISKYFSE RGD AVAKAAK QPHVGDYRQL VHELDEAEYQ EIRLMVMEIR NAYAVLYDII LKNFEKLKKP RGETKGMII
Source	Mammalian cell
Target Names	Psme1
Protein Names	Recommended name: Proteasome activator complex subunit 1 Alternative name(s): 11S regulator complex subunit alpha Short name= REG-alpha Activator of multicatalytic protease subunit 1 Proteasome activator 28 subunit alpha Short n
Expression Region	1-249
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 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. The immunoproteasome contains an alternate regulator, referred to as the 11S regulator or PA28, that replaces the 19S regulator. Three subunits (alpha, beta and gamma) of the 11S regulator have been identified. This gene encodes the alpha subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three alpha and three beta subunits combine to form a heterohexameric ring. Two transcripts encoding different isoforms have been



identified.

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.