

Recombinant Human Proteasome (prosome, macropain) Subunit, Alpha Type, 4, His-tagged

Cat. No. PSMA4-1565H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PSMA4 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.
Species	Human
Source	E.coli
Description	PSMA4, also known as proteasome subunit alpha type 4, is a member of the peptidase T1A family that is a 20S core alpha subunit. 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. It is distributed throughout eukaryotic cells at a high concentration and cleaves peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway.
Form	Liquid. In 20mM Tris-HCl buffer(pH 8.0) containing 20% glycerol, 1mM DTT, 0.1mM PMSF.
Molecular Weight	32.0 kDa (285aa), confirmed by MALDI-TOF.
Purity	>95% by SDS-PAGE
Concentration	1 mg/ml (determined by Bradford assay)

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Sequences of amino acids	MGSSHHHHHH SSGLVPRGSH MGSMSRRYD SRTTIFSPEG RLYQVEYAME AIGHAGTCLG ILANDGVLLA AERRNIHKLL DEVFFSEKIYKLNEDMACSV AGITSDANVL TNELRLIAQR YLLQYQEPIP CEQLVTALCD IKQAYTQFGG KRPFQVSLLY IGWDKHYGFQ LYQSDPSGNYGGWKATCIGN NSAAAVSMLK QDYKEGEMTL KSALALAIKV LNKTM DVSKL SAEKVEIATL TRENGKTVIR VLKQKEVEQL IKKHEEEEEAKAEREKKEKEQ KEKDK
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.
Pathways	APC/C-mediated degradation of cell cycle proteins; APC/C:Cdc20 mediated degradation of Securin; APC/C:Cdc20 mediated degradation of mitotic proteins; APC/C:Cdh1 mediated degradation of Cdc20 and other APC/C:Cdh1 targeted proteins in late mitosis/early G1; Activation of APC/C and APC/C:Cdc20 mediated degradation of mitotic proteins; Adaptive Immunity Signaling; Antigen processing: Ubiquitination& Proteasome degradation; Apoptosis; Assembly of the pre-replicative complex; Autodegradation of Cdh1 by Cdh1:APC/C; Autodegradation of the E3 ubiquitin ligase COP1; CDK-mediated phosphorylation and removal of Cdc6; CDT1 association with the CDC6:ORC:origin complex; Cell Cycle Checkpoints; Cell Cycle
GENE INFORMATION	
Gene Name	PSMA4 proteasome (prosome, macropain) subunit, alpha type, 4 [Homo sapiens]
Official Symbol	PSMA4
Synonyms	PSMA4; proteasome (prosome, macropain) subunit, alpha type, 4; HC9; PSC9; HsT17706; MGC12467; MGC24813; MGC111191; proteasome subunit alpha type-4; OTTHUMP00000185020; macropain subunit C9; proteasome subunit L; proteasome subunit HC9; proteasome component C9; multicatalyticendopeptidase complex

subunit C9; EC 3.4.25.1; Macropain subunit C9; Multicatalytic endopeptidase complex subunit C9; Proteasome component C9

Gene ID [5685](#)

mRNA Refseq [NM_001102667](#)

Protein Refseq [NP_001096137](#)

MIM [176846](#)

UniProt ID [P25789](#)

Chromosome Location [15q25.1](#)

Function peptidase activity; protein binding; threonine-type endopeptidase activity

PDB rendering based on 1iru.

