Recombinant Human PSMB9, His-tagged

Cat. No. PSMB9-30395TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human Proteasome 20S LMP2 with N terminal His tag; 220 amino acids with tag, Predicted MWt 23.5 kDa.
Species	Human
Source	E.coli
ProteinLength	199 amino acids
Description	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 proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. This gene is located in the class II region of the MHC (major histocompatibility complex). Expression of this gene is induced by gamma interferon and this gene product replaces catalytic subunit 1 (proteasome beta 6 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit.
Conjugation	HIS

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Molecular Weight	23.500kDa inclusive of tags
Form	Liquid
Purity	>90% by SDS-PAGE
Storage buffer	Preservative: NoneConstituents: 10% Glycerol, 50mM Sodium chloride, 20mM Tris HCl, pH 8.0
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Sequences of amino acids	MGSSHHHHHHSSGLVPRGSHMTTIMAVEFDGGVVMGSDSRVSAGEAVVNRVFDK LSPLHERIYCALSGSAADAQAVADMAAYQLELHGIELEEPPLVLAAANVVRNISYKYR EDLSAHLMVAGWDQREGGQVYGTLGGMLTRQPFAIGGSGSTFIYGYVDAAYKPGM SPEECRRFTTDAIALAMSRDGSSGGVIYLVTITAAGVDHRVILGNELPKFYDE
Sequence Similarities	Belongs to the peptidase T1B family.

GENE INFORMATION

Gene Name	PSMB9 proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional peptidase 2) [Homo sapiens]
Official Symbol	PSMB9
Synonyms	PSMB9; proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional peptidase 2); LMP2, proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional protease 2); proteasome subunit beta type-9; beta1i; PSMB6i; RING12;

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Gene ID	5698
mRNA Refseq	NM_002800
Protein Refseq	NP_002791
MIM	177045
Uniprot ID	P28065
Chromosome Location	6p21.3
Pathway	APC/C-mediated degradation of cell cycle proteins, organism-specific biosystem; APC/C:Cdc20 mediated degradation of Securin, organism-specific biosystem; APC/C:Cdc20 mediated degradation of mitotic proteins, organism-specific biosystem; APC/C:Cdh1 mediated degradation of Cdc20 and other APC/C:Cdh1 targeted proteins in late mitosis/early G1, organism-specific biosystem; Activation of APC/C and APC/C:Cdc20 mediated degradation of mitotic proteins, organism-specific biosystem;
Function	peptidase activity; protein binding; threonine-type endopeptidase activity;

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