Recombinant Human PSMB10, His-tagged

Cat. No. PSMB10-31221TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length protein, (amino acids 40-237, excluding propeptide) of Human PSMB10 with N terminal His tag; 255 amino acids, 26.9 kDa inclusive of tag.
Species	Human
Source	E.coli
ProteinLength	198 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. Proteolytic processing is required to generate a mature subunit. Expression of this gene is induced by gamma interferon, and this gene product replaces catalytic subunit 2 (proteasome beta 7 subunit) in the immunoproteasome.
Conjugation	HIS
Molecular Weight	26.900kDa inclusive of tags

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Form	Liquid
Purity	>90% by SDS-PAGE
Storage buffer	pH: 8.00Constituents:0.02% Tris HCl, 40% Glycerol, 0.58% Sodium chloride
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Sequences of amino acids	MGSSHHHHHHSSGLVPRGSHMTTIAGLVFQDGVILGADTRATNDSVVADKSCEKIH FIAPKIYCCGAGVAADAEMTTRMVASKMELHALSTGREPRVATVTRILRQTLFRYQG HVGASLIVGGVDLTGPQLYGVHPHGSYSRLPFTALGSGQDAALAVLEDRFQPNMTL EAAQGLLVEAVTAGILGDLGSGGNVDACVITKTGAKLLRTLSSPTEPVKRSGRYHFV PGTTAVLTQTVKPLTLELVEETVQAMEVE
Sequence Similarities	Belongs to the peptidase T1B family.

GENE INFORMATION

Gene Name	PSMB10 proteasome (prosome, macropain) subunit, beta type, 10 [Homo sapiens]
Official Symbol	PSMB10
Synonyms	PSMB10; proteasome (prosome, macropain) subunit, beta type, 10; MECL1; proteasome subunit beta type-10; beta2i; LMP10; MGC1665;
Gene ID	5699
mRNA Refseq	NM_002801
Protein Refseq	NP_002792

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MIM	176847
Uniprot ID	P40306
Chromosome Location	16q22.1
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; threonine-type endopeptidase activity;

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