

Product datasheet for **SC102824**

PSMB10 (NM_002801) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMB10 (NM_002801) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSMB10
Synonyms:	beta2i; LMP10; MECL1; PRAAS5
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC102824 sequence for NM_002801 edited (data generated by NextGen Sequencing)

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ATGCTGAAGCCAGCCCTGGAGCCCCGAGGGGGCTTCTCCTTCGAGAAGTCCAAAGAAAT
GCATCATTGGAACGCGTCTCCCGGGGCTCAAGTCCCTCACGCACGCAAGACCGGGACC
ACCATCGCGGGCCTGGTGTTCAGACGGGGTCACTTCTGGGCGCCGATACGCGAGCCACT
AACGATTCGGTTCGTGGCGGACAAGAGCTGCGAGAAGATCCAATTCATCGCCCCAAAATC
TACTGCTGTGGGGCTGGAGTAGCCGCGGACGCCGAGATGACCACACGGATGGTGGCGTCC
AAGATGGAGCTACACGCGTTATCTACGGGCCGCGAGCCCCGCGTGGCCACGGTCACTCGC
ATCCTGCGCCAGACGCTTTCAGGTACCAGGGCCACGTGGGTGCATCGCTGATCGTGGG
GGCGTAGACCTGACTGGACCGCAGCTCTACGGTGTGCATCCCCATGGCTCCTACAGCCGT
CTGCCCTTACAGCCCTGGGCTCTGGTCAAGACGCGGCCCTGGCGGTGCTAGAAGACCGG
TTCCAGCCGAACATGACGCTGGAGGCTGCTCAGGGGCTGCTGGTGAAGCCGTCACCGCC
GGGATCTTGGGTGACCTGGGCTCCGGGGCAATGTGGACGCATGTGTGATCACAAGACT
GGCGCAAAGCTGCTGCGGACACTGAGCTCACCCACAGAGCCCGTGAAGAGGTCTGGCCGC
TACCACTTTGTGCTGGAACACAGCTGTCTGACCCAGACAGTGAAGCCACTAACCCCTG
GAGCTAGTGGAGGAACTGTGCAGGCTATGGAGGTGGAGTAA
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Clone variation with respect to NM_002801.3



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_002801 unedited NGGGGGTTCAAATTTGTATACGACTCACTATAGGCGGCCGCAATTCGCACGAGGCGCTT GTCTGGCCGACTCATCCGCCCGGACCCCTAATCCCCTCTGCCTGCCCAAGATGCTGAA GCCAGCCCTGGAGCCCCGAGGGGGCTTCTCCTTCGAGAAGTGCCTGCAAGAAATGCATCATT GGAACGCGTCTCCCGGGGCTCAAGTCCCTCACGCACGCAAGACCGGGACCACCATCGC GGGCCTGGTGTCCAAGACGGGGTCAATCTGGGCGCCGATACGCGAGCCACTAACGATTC GGTCTGGCGGACAAGAGCTGCGAGAAGATCCACTTCATCGCCCCAAAATCTACTGCTG TGGGGCTGGAGTAGCCCGGACCGGAGATGACCACACGGATGGTGGCGTCCAAGATGGA GCTACACGCGTTATCTACGGGCCGAGCCCCGCTGGCCACGGTCACTCGCATCTGCG CCAGACGCTCTTCAGGTACCAGGGCCACGTGGGTGCATCGCTGATCGTGGGCGGCGTAGA CCTGACTGGACCGCAGCTCTACGGTGTGCATCCCCATGGCTCCTACAGCCGTCTGCCCTT CACAGCCCTGGGCTCTGGTCAGGACGCGGCCCTGGCGGTGCTAGAAGACCGGTTCCAGCC GAACATGACGCTGGAGGCTGCTCANGGGCTGCTGGTGAAGCCGTACCCGCCGGATCTT GGGTGACCTGNGCTCCGGGGCAATGTGGACGCATGTTGTGATCACAAGACTGGCGCCA AGCTGCTGCGGACACTGAGCTCACCCANAGCCGTGAAGAAGTCTGGCCGCTACCACTTT GTGCTGGAACACAGCTTTCTGACCCAGACAGTGAAGCCACTAACCTGNAGCTAGTG GNAGGAAGTGTGCAGCTATTGAGG
Restriction Sites:	NotI-NotI
ACCN:	NM_002801
Insert Size:	1000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_002801.2</u> , <u>NP_002792.1</u>
RefSeq Size:	1009 bp
RefSeq ORF:	822 bp
Locus ID:	5699
UniProt ID:	<u>P40306</u>
Cytogenetics:	16q22.1
Domains:	proteasome
Protein Families:	Druggable Genome, Protease

Protein Pathways: Proteasome

Gene Summary: 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. [provided by RefSeq, Jul 2008]