

## Product datasheet for SC101220

### PSMB8 (NM\_148919) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PSMB8 (NM_148919) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSMB8
Synonyms:	ALDD; D6S216; D6S216E; JMP; LMP7; NKJO; PRAAS1; PSMB5i; RING10
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC101220 sequence for NM_148919 edited (data generated by NextGen Sequencing)

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ATGGCGCTACTAGATGTATGCGGAGCCCCCGAGGGCAGCGGCCGAATCGGCTCTCCCG
GTTGCGGGAAGCGGGCGTCGCTCGGACCCAGGACACTACAGTTTCTCTATGCGATCTCCA
GAGCTCGCTTTACCCCGGGAATGCAGCCACAGAATTCTCCAGTCCCTGGGTGGGGAC
GGAGAAAGGAACGTTTCAGATTGAGATGGCCATGGCACCACGCTCGCCTTCAAGTTC
CAGCATGGAGTGATTGCAGCAGTGGATTCTCGGGCCTCAGCTGGGTCTACATTAGTGCC
TTACGGGTGAACAAGGTGATTGAGATTAACCCTTACCTGCTTGGCACCATGTCTGGCTGT
GCAGCAGACTGTCAGTACTGGGAGCGCTGCTGGCCAAGGAATGCAGGCTGTAATCTG
CGAAATGGAGAACGTATTTTCAGTGTGCGCAGCCTCAAGCTGCTGTCCAACATGATGTG
CAGTACCGGGGCATGGGCTCTCTATGGGCAGTATGATCTGTGGCTGGGATAAGAAGGT
CCTGGACTCTACTACGTGGATGAACATGGGACTCGGCTCTCAGGAAATATGTTCTCCACG
GGTAGTGGGAACACTTATGCCTACGGGGTCATGGACAGTGGCTATCGGCCTAATCTTAGC
CCTGAAGAGGCCTATGACCTTGGCCGAGGGCTATTGCTTATGCCACTCACAGAGACAGC
TATTCTGGAGGCGTTGTCAATATGTACCACATGAAGGAAGATGGTTGGGTGAAAGTAGAA
AGTACAGATGTCAGTGACCTGCTGCACCAGTACCGGGAAGCCAATCAATAA

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Clone variation with respect to NM\_148919.3



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_148919 unedited            GTCAGAAATTTGTAATACGACTCACTATAGGGGCGGCCGGAATTCGCACGAGGCTGGGC            GGTTCATGGCGCTACTAGATGTATGCGGAGCCCCCGAGGGCAGCGGCCGGAATCGGCTCT            CCCGGTTGCGGGAAGCGGGCGTCGCTCGGACCCAGGACACTACAGTTTCTCTATGCGATC            TCCAGAGCTCGCTTTACCCCGGGGAATGCAGCCACAGAATTCCTCCAGTCCCTGGGTGG            GGACGGAGAAAAGGAACGTTTCAGATTGAGATGGCCCATGGCACCACCACGCTCGCCTCAA            GTTCCAGCATGGAGTGATTGCAGCAGTGGATTCTCGGGCCTCAGCTGGGTCTACATTAG            TGCTTACGGGTGAACAAGGTGATTGAGATTAACCCTTACCTGCTTGGCACCATGTCTGG            CTGTGCAGCAGACTGTCAGTACTGGGAGCGCCTGCTGGCCAAGGAATGCAGGCTGTACTA            TCTGCGAAATGGAGAACGTATTTCACTGTCGGCAGCCTCCAAGCTGCTGTCCAACATGAT            GTGCCAGTACCGGGGCATGGCCCTCTCTATGGGCAGTATGATCTGTGGCTGGGATAAGAA            GGGTCTGGACTTACTACGTGGATGAACATGGGACTCGGCTCTCAGGAAATATGTTCTC            CACGGGTAGTGGGAACACTTATGCCTACGGGGTCATGGACAGTGGCTATCGGCCTAATCT            TAGCCCTGAAGAGGCCTATGACCTTGGCCGCAGGGCTATTGCTTATGCCACTCACAGAGA            CAGCTATTCTGGGAGGCGTTGTCAATATGTACCACATGAAGGAAAGAATGTTGGGTGA            AAAGTANAAAGTTACAGAATGTCAGTTGACCTGCTGCACCAAGTACCGGGGAGCCATCATA            TGGGTGGGTGGGTGCAGCTGGGCAGGTCTCTCTGGGGAGGTCTTGGCCGACTCAGGGACC            TAAGCACGTTTAGTCCAAGGAAAAAAGCC</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_148919 unedited            AAGGCTCTGGCTGTAACCTCAGGGCCAGGAGAGGCACTGGGGAGGGGTACAGGGATGC            CACCCGGGATCTGTTTCAGGAAACAGCTATGACCCGCGCCGCAATCTAGAGTCGAGTTTTT            TTTTTTTTTTTTTTTTTTTTATTTATAACCGTTTTTCTTTATTCTACTTAGTGGGGCACCC            AGAAACTTCCCTGGGGGAAATGCTTGTTCAAATAGAGAACACGCAGAAGATGCACTTCAC            CGGCCTCCTCTGGCTGCTGAGCCCGTACTCTCTTTGGCTCAGGCTAGGCCTCTTCTTC            TCCTTGGACTTAACGTGGCTTAGGTCCCTGAGTCGGCCAAGACCTCCCAGAGGAGACCTG            CCCAGCTGCCACCACCACCATTATTGATTGGCTTCCCGGTACTGGTGCAGCAGGTCACTG            ACATCTGTACTTTCTACTTTACCCAACCATCTTCCTTCACTGTGGTACATATTGGACAAC            GCCTCCAGAATAGCTGTCTCTGTGAGTGGCATAAGCAATAGCCCTGCGGCCAAGGTCATA            GGCTCTTCAGGGCTAAGATTAGGCCGATAGCCACTGTCCATGACCCCGTAGGCATAAGT            GTTCCCCTACCCGTGGAGAACATATTTTCTGAGAGCCGAGTCCCATGTTTCATCCACGTA            GTAGAGTCCAAGACCCTTCTTATCCNAGCCACAGATCATACTTGCCATAGAGAAGGCCA            TGCCCCGTACTTGACAATCATGTGGACAAGACTTGGGGCTTGGCAGCTGAATACTTCTC            ATTCGGAATAGTCACTTGATTCCTGGCAAAGGGTTTCATACTTGAGTGTGCAACCAAT            GGCAACGGTAAGTATTCATACACTTGTCCGAGAGCTTGTGGCCCTG</p>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_148919
<b>Insert Size:</b>	1150 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_148919.3</a> , <a href="#">NP_683720.2</a>
<b>RefSeq Size:</b>	1135 bp
<b>RefSeq ORF:</b>	831 bp
<b>Locus ID:</b>	5696
<b>UniProt ID:</b>	<a href="#">P28062</a>
<b>Cytogenetics:</b>	6p21.32
<b>Domains:</b>	proteasome
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	Proteasome
<b>Gene Summary:</b>	<p>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 3 (proteasome beta 5 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. Two alternative transcripts encoding two isoforms have been identified; both isoforms are processed to yield the same mature subunit. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and contains an alternate in-frame exon in the 5' coding region, compared to variant 1. Isoform E2 has a distinct N-terminus, compared to isoform E1.</p>