**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for SC118417

## Proteasome subunit beta type 4 (PSMB4) (NM_002796) Human Untagged Clone

### Product data:

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|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Proteasome subunit beta type 4 (PSMB4) (NM_002796) Human Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | Proteasome subunit beta type 4 |
| **Synonyms:** | HN3; HsN3; PRAAS3; PROS-26; PROS26 |
| **Mammalian Cell Selection:** | None |
| **Vector:** | pCMV6-XL5 |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |

**Fully Sequenced ORF:**

>OriGene ORF within SC118417 sequence for NM_002796 edited (data generated by NextGen Sequencing)

ATGGAAGCGTTTTTGGGGTCGCGGTCCGGACTTTGGGCGGGGGGTCCGGCCCCAGGACAG
TTTTACCGCATTCCGTCCACTCCCGATTCCTTCATGGATCCGGCGTCTGCACTTTACAGA
GGTCCAATCACGCGGACCCAGAACCCCATGGTGACCGGGACCTCAGTCCTCGGCGTTAAG
TTCGAGGGCGGAGTGGTGATTGCCGCAGACATGCTGGGATCCTACGGCTCCTTGGCTCGT
TTCCGCAACATCTCTCGCATTATGCGAGTCAACAACAGTACCATGCTGGGTGCCTCTGGC
GACTACGCTGATTTCCAGTATTTGAAGCAAGTTCTCGGCCAGATGGTGATTGATGAGGAG
CTTCTGGGAGATGGACACAGCTATAGTCCTAGAGCTATTCATTCATGGCTGACCAGGGCC
ATGTACAGCCGGCGCTCGAAGATGAACCCTTTGTGGAACACCATGGTCATCGGAGGCTAT
GCTGATGGAGAGAGSTTCCTCGGTTATGTGGACATGCTTGGTGTAGCCTATGAAGCCCCT
TCGCTGGCCACTGGTTATGGTGCATACTTGGCTCAGCCTCTGCTGCGAGAAGTTCTGGAG
AAGCAGCCAGTGCTAAGCCAGACCGAGGCCCGCGACTTAGTAGAACGCTGCATGCGAGTG
CTGTACTACCGAGATGCCCGTTCTTACAACCGGTTTCAAACCGCCACTGTCACCGAAAAA
GGTGTTGAAATAGAGGGACCATTGTCTACAGAGACCAACTGGGATATTGCCCACATGATC
AGTGGCTTTGAATGA

Clone variation with respect to NM_002796.2
495 c=>s;701 t=>c

View online »

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM_002796 unedited
NGTTCANAATTGTATACGACTCACTATAGGCGGCCGCGNAATCGGCACGAGGGTGACTAA
GATGGAAGCGTTTTTGGGGTCGCGGTCCGGACTTTGGGCGGGGGGTCCGGCCCCAGGACA
GTTTTACCGCATTCCGTCCACTCCCGATTCCTTCATGGATCCGGCGTCTGCACTTTACAG
AGGTCCAATCACGCGGACCCAGAACCCCATGGTGACCGGGACCTCAGTCCTCGGCGTTAA
GTTCGAGGGCGGAGTGGTGATTGCCGCAGACATGCTGGGATCCTACGGCTCCTTGGCTCG
TTTCCGCAACATCTCTCGCATTATGCGAGTCAACAACAGTACCATGCTGGGTGCCTCTGG
CGACTACGCTGATTTCCAGTATTTGAAGCAAGTTCTCGGCCAGATGGTGATTGATGAGGA
GCTTCTGGGAGATGGACACAGCTATAGTCCTAGAGCTATTCATTCATGGCTGACCAGGGC
CATGTACAGCCGGCGCTCGAAGATGAACCCTTTGTGGAACACCATGGTCATCGGAGGCTA
TGCTGATGGAGAGAGGTTCATATGAATACCAATAACTTATTTCCTTTACCACCCAACCTA
GTACCTGTGTAGTATCTCTTCTGTCTCTTCTCCCCAAGTGAATCCCACTTTCACTCAGAC
CCCATGGTCCCCCTTCTCAGCTAAGATGAACCTAACGTGAAAAGAGTTTTGACCCATTGC
GTCCTGTTAGCTTCCTCGGGTATGTGGACCTGCTTGGTGTACCCCATGAACCCCCTTCCT
GGCCCCTGGTATGGGGCCCTCCTGGCTCACCCTTTGCTGGGAGAAATCTGGACAACCACC
CAAGTCTAACCAGACCGAGGCCCCGCACTTATAAAACGCTGCTGCCAATGCCTGCCCTCC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM_002796 unedited
CCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGCATTTTGAAGAATTTAT
TTACTTTACAAAAGAAGAGTCTATCTTTGAACTAGCCAAGTTCAAAGTTAAAAGTAGGGC
AACTTCAGTTCTGGATAATGCATCTGTATTTCATTCAAAGCCACTGATCATGTGGGCAAT
ATCCCAGTTGGTCTCTGTAGACAATGGTCCCTCTATTTCAACACCTTTTTCGGTGACAGT
GGCGGTTTGAAACCGGTTGTAAGAACGGGCATCTCGGTAGTACAGCACTCGCATGCAGCG
TTCTACTAAGTCGCGGGCCTCGGTCTGGCTTAACACTGGCTGCTTCTCCAGAACTTCTCG
CAGCAGAGGCTGAGCCAAGTATGCACCATAACCAGTGGCCAGCGAAGGGGCTTCATAGGC
TACACCAAGCATGTCCACATAACCGAGGAAGCTAACAGGACACAATGGGTCAAAACTCAT
TTCACCTTAGGTTCATCTTAGCTGAAGAAGGGGACCATGGGGTCTGAGTTAAAGTGGGAT
TCACTTGGGGAGAAGAGACAGAAGAGATACTACACAGGTACTAGGTTGGGTGGTAAAGGA
AATAAGTTATTTGTATTCATATGAACCTCTCTCCATCAGCATAGCCTCCGATGACCATGG
TGTTCCACAAAGGGTTCATCTTCGAGCGCCGGCTGTACATGGCCCTGGTCAGCCATGAAT
GAATAGCTCTNAGACTATAGCTGTGTCCATCTCCCAGAAGCTCCTCATCAATCACCATCC
TGCCGAGAACTTGCTCCAAATACTGGGAATCAACGTATTCCCCAGAAGCACCCAGCATGG
TCCTTGTTGTTGACTCGCATAATGCGAGAGAAGTTGCGGAAACAAGCCAAGAGCCCTAGG
ATTCCAACATGTCTGCGGAATCACCACTCCGCC

**Restriction Sites:** NotI-NotI

**ACCN:** NM_002796

**Insert Size:** 1140 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).

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|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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:** | NM_002796.2, NP_002787.2 |
| **RefSeq Size:** | 925 bp |
| **RefSeq ORF:** | 795 bp |
| **Locus ID:** | 5692 |
| **UniProt ID:** | P28070 |
| **Cytogenetics:** | 1q21.3 |
| **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. [provided by RefSeq, Jul 2008] |