

## Product datasheet for **SC111678**

### PSMD4 (NM\_002810) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | PSMD4 (NM_002810) Human Untagged Clone  |
| Tag:                      | Tag Free  |
| Symbol:                   | PSMD4   |
| Synonyms:                 | AF; AF-1; ASF; MCB1; pUB-R5; Rpn10; S5A   |
| Mammalian Cell Selection: | None  |
| Vector:                   | <u><a href="#">pCMV6-XL5</a></u>  |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| Fully Sequenced ORF:      | >OriGene ORF within SC111678 sequence for NM_002810 edited (data generated by NextGen Sequencing) |

```
ATGGTGTTGGAAAGCACTATGGTGTGTGGACAACAGTGAGTATATGCGGAATGGAGAC
TTCTTACCCACCAAGGCTGCAGGCCAGCAGGATGCTGTCAACATAGTTTGTCAATCAAAG
ACCCGAGCAACCCTGAGAAACAAGTGGGCCTTATCACACTGGCTAATGACTGTGAAGTG
CTGACCACACTCACCCAGACACTGGCCGTATCCTGTCCAAGCTACATACTGTCCAACCC
AAGGGCAAGATCACCTTCTGCACGGGCATCCGCGTGGCCCATCTGGCTCTGAAGCACCGA
CAAGGCAAGAATCACAAGATGCGCATCATTGCCTTTGTGGGAAGCCAGTGGAGGACAAT
GAGAAGGATCTGGTGAACTGGCTAAACGCCTCAAGAAGGAGAAAGTAAATGTTGACATT
ATCAATTTTGGGAAGAGAGGAGTGAACACAGAAAAGCTGACAGCCTTTGTAACACGTTG
AATGGCAAAGATGGAACCGTTTCATCTGGTGACAGTGCCTCCTGGGCCAGTTTGGCT
GATGCTCTCATCAGTTCTCCGATTTTGGCTGGTGAAGGTGGTGCATGCTGGGTCTTGGT
GCCAGTGACTTTGAATTTGGAGTAGATCCCAGTGCTGATCCTGAGCTGGCCTTGGCCCTT
CGTGTATCTATGGAAGAGCAGCGGCAGCGGCAGGAGGAGGCCCGGCGGGCAGCTGCA
GCTTCTGCTGCTGAGGCCGGATTGCTACGACTGGGACTGAAGACTCAGACGATGCCCTG
CTGAAGATGACCATCAGCCAGCAAGAGTTTGGCCGCACTGGGCTTCTGACCTAAGCAGT
ATGACTGAGGAAGAGCAGATTGCTTATGCCATGCAGATGTCCCTGCAGGGAGCAGAGTTT
GGCCAGGCGGAATCAGCAGACATTGATGCCAGCTCAGCTATGGACACATCCGAGCCAGCC
AAGGAGGAGGATGATTACGACGTGATGCAGGACCCGAGTTCCTCAGAGTGTCCCTAGAG
AACCTCCAGGTGTGGATCCCAACAATGAAGCCATTGAAATGCTATGGGCTCCCTGGCC
TCCAGGCCACCAAGGACGGCAAGAAGGACAAGAAGGAGGAAGACAAGAAGTGA
```

Clone variation with respect to NM\_002810.2  
951 t=>c



[View online »](#)

|                                     |  |
|-------------------------------------|--|
| <b>5' Read Nucleotide Sequence:</b> | <p>&gt;OriGene 5' read for NM_002810 unedited<br/>         NAACGGTTCCAANNCATATTTGGTNNAATNACCGNAACTNCACTTATNAGGGNCCGGCN<br/>         NCGCGNAATTNCGGNCACGAAGGNAAGGTGGCAAGNAATGGTGTGGNAAAGCA<br/>         CTATGGTGTGTGGACAACAGTGAGTATATGCGGAATGGAGACTTCTTACCCACCAGGC<br/>         TGCAGGCCCAGCAGGATGCTGTCAACATAGTTTGCATTCAAAGACCCGAGCAACCCTG<br/>         AGAACAACTGGCCCTTATCACACTGGCTAATGACTGTGAAGTGTGACCACACTCACCC<br/>         CAGACACTGGCCGTATCCTGTCCAAGCTACATACTGTCCAACCCAAGGGCAAGATCACCT<br/>         TCTGCACGGGCATCCGCGTGGCCATCTGGCTCTGAAGCACCGACAAGGCAAGAATCACA<br/>         AGATGCGCATCATTGCCTTTGTGGGAAGCCAGTGGAGGACAATGAGAAGGATCTGGTGA<br/>         AACTGGCTAAACGCCTCAAGAAGGAGAAAAGTAAATGTTGACATTATCAATTTTGGGGAAG<br/>         AGGAGGTGAACACAGAAAAGCTGACAGCCTTTGTAACACGTTGAATGGCAAAGATGGAA<br/>         CCGGTTCTCATCTGGTGACAGTGCCTCCTGGGCCAGTTTGGCTGATGCTCTCATCAGTT<br/>         CTCCGATTTTGGCTGGTGAAGGTGGTGCATGCTGGGTCTTGGTCCAGTGACTNTGAAT<br/>         TTGGAGTAGATCCAGTCTGATCCTGAGCTGGCCTTGGCCCTTCGTGTATCTATGGAAA<br/>         AGCANCGCANNNGCANNAGAGAGGGAGGCCCGGCCAGCTGCAGCTTCTGCTGCTNGA<br/>         GCCGGGATTGCTACGACTGGGACTGAAGACTCANACGATGCCCTGCTTGAGATGACCATC<br/>         AGCANCCAAGAATTGGNCCGCACTGGGCTTTCTGACCTAGC</p> |
| <b>3' Read Nucleotide Sequence:</b> | <p>&gt;OriGene 3' read for NM_002810 unedited<br/>         GGACCTTGAATGGCACTTCCAGGNCCAGNAAAGCACTGGGGNAGGGTCACAGGGATGC<br/>         CACCCGGGATCTGTTCCAGAAAAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTT<br/>         TTTTTTTTTTTTTTAAAAGTTGCCAAGCTTTATTTAGGCTGTAATGGTTACAGATAACA<br/>         CACATCTAACCTATATATCCGTGCTTCCCATGCAGTCCCCTAAGCAGACTCAGTACCC<br/>         TTTCCCTCCAGTCTCACTTCTTGTCTTCTCCTTCTTGTCTTCTTGGCCCTTGGTGG<br/>         CCTGGGAGGCCAGGGAGCCCATAGCATTTCGAATGGCTTCATTGTTGGGATCCACACCTG<br/>         GGAGGTTCTCTAGGACACTCTGAAGGAACCTCGGGTCTGCATCACGTCGTAATCATCCT<br/>         CCTCCTTGGCTGGCTCGGATGTGTCCATAGCTGAGCTGGCATCAATGTCTGCTGATTCCG<br/>         CCTGGCCAAACTGTCTCCCTGCAGGACATCTGCATGGCATAAGCAATCTGCTCTTCCCT<br/>         AGTCATACTGCTTAGGTCAGGAAGCCCAGTGGCCCAAACATTTGCTGGCTGATGGTCAT<br/>         CTTCCAGCAAGGGCATCGTCTGAGTCTCCAATCCCAGTCCGTAGCAAATCCCGGCCTTAG<br/>         CAGCAAAAAGCTGCACCTGCCCGCCGGCCCTCCTCCTCCCTGCGATTCCGGCTGCTTTTTT<br/>         ATAGAAAACCCGAAGGGCCAGGCCACTTAAGGTCAGCACTGGGATCCTTCTCCAATTG<br/>         AAGGTCCGGGACACAAGACCCGTATGGGAACCTCTTAACCGCGCAAATGCGAAAACCTG<br/>         TTCAAGAATCGCCAAATTTGGCCCCACGGACTGCACCAAAAAGATAAACCGTTTCCTTT<br/>         CTTTC</p>                            |
| <b>Restriction Sites:</b>           | NotI-NotI  |
| <b>ACCN:</b>                        | NM_002810  |
| <b>Insert Size:</b>                 | 1350 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).   |

**Reconstitution Method:**

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:** [NM\\_002810.1](#), [NP\\_002801.1](#)

**RefSeq Size:** 1313 bp

**RefSeq ORF:** 1134 bp

**Locus ID:** 5710

**UniProt ID:** [P55036](#)

**Cytogenetics:** 1q21.3

**Domains:** VWA, UIM

**Protein Pathways:** Proteasome

**Gene Summary:** The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core 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. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase 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 one of the non-ATPase subunits of the 19S regulator lid. Pseudogenes have been identified on chromosomes 10 and 21. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) uses an alternate in-frame splice junction compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.