

Product datasheet for **SC118429**

PSMD2 (NM_002808) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | PSMD2 (NM_002808) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | PSMD2 |
| Synonyms: | P97; RPN1; S2; TRAP2 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

Fully Sequenced ORF: >OriGene ORF within SC118429 sequence for NM_002808 edited (data generated by NextGen Sequencing)

```

ATGGAGGAGGGAGGCCGGGACAAGGCGCCGGTGCAGCCCCAGCAGTCTCCAGCGGCNNNN
CCCCGGCGCACGGACGAGAAGCCGAGCGGCAAGGAGCGGCGGGATGCCGGGGACAAGGAC
AAAGAACAGGAGCTGTCTGAAGAGGATAAACAGCTTCAAGATGAAGTGGAGATGCTCGTG
GAACGACTAGGGGAGAAGGATACATCCCTGTATCGACCAGCGCTGGAGGAATTGCGAAGG
CAGATTCTTCTTCTACAACCTCCATGACTTCAGTGCCCAAGCCTCTCAAATTTCTGCCT
CCACACTATGGCAAACCTGAAGGAAATCTATGAGAACATGGCCCCCTGGGGAGAATAAGCGT
TTTGCTGCTGACATCATCTCCGTTTTGGCCATGACCATGAGTGGGGAGCGTGAGTGCCTC
AAGTATCGGCTAGTGGGCTCCCAGGAGGAATTGGCATCATGGGGTTCATGAGTATGTCAGG
CATCTGGCAGGAGAAGTGGCTAAGGAGTGGCAGGAGCTGGATGACGCAGAGAAGGTCCAG
CGGGAGCCTCTGCTCACTCTGGTGAAGGAAATCGTCCCTATAACATGGCCACAATGCA
GAGCATGAGGCTTGCACCTGCTTATGGAATGAGCAGGTGGACATGCTGGAGAAGGAC
ATTGATGAAAATGCATATGCAAAGGTCTGCCTTTATCTCACCAGTTGTGTGAATTACGTG
CCTGAGCCTGAGAAGTCAAGCCCTACTGCGTTGTGCCCTGGGTGTGTTCCGAAAGTTTAGC
CGCTTCCCTGAAGCTCTGAGATTGGCATTGATGCTCAATGACATGGAGTTGGTAGAAGAC
ATCTTACCTCCTGCAAGGATGTGGTAGTACAGAAACAGATGGCATTTCATGCTAGGCCGG
CATGGGGTGTTCCTGGAGCTGAGTGAAGATGTCGAGGAGTATGAGGACCTGACAGAGATC
ATGTCCAATGTACAGCTCAACAGCAACTTCTTGGCCTTAGCTCGGGAGCTGGACATCATG
GAGCCCAAGGTGCCTGATGACATCTACAAAACCCACTAGAGAACAACAGGTTTGGGGGC
AGTGGCTCTCAGTGGACTCTGCCCGCATGAACCTGGCCTCCTCTTTGTGAATGGCTTT
GTGAATGCAGCTTTTGGCCAAGACAAGCTGCTAACAGATGATGGCAACAATGGCTTTAC
AAGAACAAGGACCACGGAATGTTGAGTGCAGCTGCATCTTTGGGATGATTCTGCTGTGG
GATGTGGATGGTGGCCTACCCAGATTGACAAGTACCTGTACTCCTCTGAGGACTACATT
AAGTCAGGAGCTCTTCTTGCCTGTGGCATAGTGAACCTTGGGGTCCGGAATGAGTGTGAC
CCTGCTCTGGCACTGCTCTCAGACTATGTTCTCCACAACAGCAACACCATGAGACTTGGT
TCCATCTTTGGGCTAGGCTTGGCTTATGCTGGCTCAAATCGTGAAGATGCCTAACACTG
CTGCTGCCTGTGATGGGAGATTCAAAGTCCAGCATGGAGGTGGCAGGTGTACAGCTTTA
GCCTGTGGAATGATAGCAGTAGGGTCTGCAATGGAGATGTAACCTCCACTATCCTTCAG
ACCATCATGGAGAAGTCAAGACTGAGCTCAAGGATACTTATGCTCGTTGGCTTCTCTT
GGACTGGGTCTCAACCACCTGGGAAGGGTGGAGCCATCGAGGCAATCCTGGCTGCACTG
GAGGTTGTGTGAGAGCCATTCGCGAGTTTTGCCAACACACTGGTGGATGTGTGTGCATAT
GCAGGCTCTGGGAATGTGCTGAAGGTGCAGCAGCTGCTCCACATTTGTAGCGAACACTTT
GACTCCAAAGAGAAGGAGGAAGACAAGACAAGAAGGAAAAGAAAAGACAAGGACAAGAAG
GAAGCCCCGTGCTGACATGGGAGCACATCAGGGAGTGGCTGTTCTGGGGATTGCCCTTATT
GCTATGGGGGAGGAGATTGGTGCAGAGATGGCATTACGAACCTTTGGCCACTTGTGAGA
TATGGGGAGCCTACACTCCGGAGGGCTGTACCTTAGCACTGGCCCTCATCTCTGTTTCA
AATCCACGACTCAACATCCTGGATACCTAAGCAAATTTCTCTCATGATGCTGATCCAGAA
GTTTCTATAACTCCATTTTTGCCATGGGCATGGTGGGCAGTGGTACCAATAATGCCCGT
CTGGCTGCAATGCTGCGCCAGTTAGCTCAATATCATGCCAAGGACCCAAACAACCTCTTC
ATGGTGGCCTTGGCACAGGGCCTGACACATTTAGGGAAGGGCACCCCTTACCCTCTGCCCC
TACCACAGCGACCGGAGCTTATGAGCCAGGTGGCCGTGGCTGGACTGCTCACTGTGCTT
GTCTCTTTCTGGATGTTGAAACATTATTCTAGGCAAATCACACTATGTATTGTATGGG
CTGGTGGCTGCCATGCAGCCCCGAATGCTGGTTACGTTTGTGAGGAGCTGCGGCCATTG
CCAGTGTCTGTCGTGGGCCAGGAGTGGATGTGGTGGGCCAGGCTGGCAAGCCGAAG
ACTATCACAGGGTCCAGACGCATACAACCCAGTGTGTTGGCCACGGGGAACGGGCA
GAATTGGCCACTGAGGAGTTTCTTCTGTTACCCCATCTGGAAGGTTTTGTTATCCTT
CGGAAGAACCCCAATTATGATCTCTAA

```

Clone variation with respect to NM_002808.3
57 g=>n;58 g=>n;59 c=>n;60 c=>n

| | |
|-------------------------------------|---|
| 5' Read Nucleotide Sequence: | <p>>OriGene 5' read for NM_002808 unedited</p> <pre>TGCACCATTTTGTAAACGACTCACTATAGGGCGGCCCGGATTCCGGCACGAGGCGGAGA TGGAGGAGGGAGGCCGGGACAAGGCGCCGGTGCAGCCCCAGCAGTCTCCAGCGGCGGCC CCGGCGGCACGGACGAGAAGCCGAGCGGCAAGGAGCGCGGGATGCCGGGGACAAGGACA AAGAACAGGAGCTGTCTGAAGAGGATAAACAGCTTCAAGATGAACTGGAGATGCTCGTGG AACGACTAGGGGAGAAGGATACATCCCTGTATCGACCAGCGCTGGAGGAATTGCGAAGGC AGATTCGTTCTTCTACAACCTCCATGACTTCAGTGCCCAAGCCTCTCAAATTTCTGCGTC CACACTATGGCAAACGAAGGAAATCTATGAGAACATGGCCCTGGGGAGAATAAGCGTT TTGCTGCTGACATCATCTCCGTTTTGGCCATGACCATGAGTGGGGAGCGTGAGTGCCCTA AGTATCGGCTAGTGGGCTCCCAGGAGGAATTGGCATCATGGGGTCATGAGTATGTCAGGC ATCTGGCAGGAGAAGTGGCTAAGGAGTGGCAGGAGCTGGATGACGCAGAGAAGGTCCAGC GGGAGCCTCTGCTCACTCTGGTGAAGGAAATCGTCCCCTATAACATGGCCCCACATGCAG AGCATGAGGCTTGCACCTGCTTATGGAATTGAGCANGTGGACATGCTGNAGAAGGACA TTGATGAANATGCATATGCAAAGGTCTGCCTTTATCTACCAGNTGTGTGAANTACGTGC CTGAGCCTGAGAACTCAGCCCTACTGCGTTGNGCCCTGGGTGTGTTTCGAAAGTTTAGCC GCTTCCCTGAACCTCTGAGATTGGCATTGATGCTCAATGACATGNNAGTGGCAGAAGACA TCTTCACCTCCTGCAGGCATTGTGCAGTACAAN</pre> |
| 3' Read Nucleotide Sequence: | <p>>OriGene 3' read for NM_002808 unedited</p> <pre>CAATCTAGTATCGAGTTTTTTTTTTTTTTTTTTCCTTGGGGATAAAAAGTCTTTATTGAAC AACCTTATCTCACTCAGTAACAAAAGAGCAGGAGGCGACAATCCCCCAGAAGTCTGCAG CCGTGTCCACCCTTGGCAGCAGGATGCATGGCCTGCTGATAACATCAGCTGCAGTTCAGA GCCCTGGTGGCCACTTAGAGATCATAATTGGGGTTCTTCCGAAGGATAACAAAACCTTC CAGATTGGGGGTAAACAGGAAGAACTCCTCAGTGGCCAATTCTGCCCGTTCCTCCGTGGGC CAACAACACTGGGGTGTATGCGTCTGGAACCCTGTGATAGTCTTCGGCTTGCCAGCCTG GCCACCACATCCACTGCCTGGCCACACGGACAGACTGGCAATGGCCGCAGCTCCTC ATCAAACGTAACCAGCATTGGGGCTGCATGGCAGCCACCAGCCCATACAATACATAGTG TGATTTGCTAGAAATAATGTTTCGAACATCCAGGAAAGATAACAAGCACAGTGAGCAGTCC AGCCACGGCCACCTGGCTCATAAGCTGCCGGCCGCTGTGGTATGGGCAGAGGGAAAGGTT GCCCTTCCCTAATGTGTCAGGCCCTGTGCCAAGCCACCATGAAGAGGTCTGTTGGTC CCTAGCCATGATATTGAGCTAACTGGCGCAGCATTGCAGCCAGACGGGCTTTTTTGGGGC CACTGCCACCTGCCATGGCAAATGGAGTTTTAGGATACTTCGGATCAGCATCATGAG AGAATTTGCTAAGGGTCTCCAGGATGTCGAGTTCGTGGACTGAAACAGAGATGAGGGCCA CTGCTAAGGTACCACCCTCCGAATGTAAGCCCCCATATCCTACAAGGGGCCAGGTTCTG AAAGGCCTTTTGACCCATTTCCCCNCTTACATATAGGCAATCCCAGAACACACCTCCTG GGGGCCCCCTGTAAAAGGGCTCCTTATGGCCTGTTCTTACTCG</pre> |
| Restriction Sites: | NotI-NotI |
| ACCN: | NM_002808 |
| Insert Size: | 3000 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:

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_002808.3](#), [NP_002799.3](#)

RefSeq Size: 2990 bp

RefSeq ORF: 2727 bp

Locus ID: 5708

UniProt ID: [Q13200](#)

Cytogenetics: 3q27.1

Domains: PC_rep

Protein Families: Druggable Genome

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. In addition to participation in proteasome function, this subunit may also participate in the TNF signalling pathway since it interacts with the tumor necrosis factor type 1 receptor. A pseudogene has been identified on chromosome 1. Alternative splicing results in multiple transcript variants of this gene. [provided by RefSeq, Jul 2013]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).