

Product datasheet for **SC118388**

26S proteasome non ATPase regulatory subunit 12 (PSMD12) (NM_002816) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	26S proteasome non ATPase regulatory subunit 12 (PSMD12) (NM_002816) Human Untagged Clone
Tag:	Tag Free
Symbol:	26S proteasome non ATPase regulatory subunit 12
Synonyms:	p55; Rpn5; STISS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC118388 sequence for NM_002816 edited (data generated by NextGen Sequencing)

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ATGGCGGACGGCGGCTCGGAGCGGGCTGACGGGCGCATCGTCAAGATGGAGGTGGACTAC
AGCGCCACGGTGGATCAGCGCCTCCCGAGTGTGCGAAGCTAGCCAAGGAAGGAAGACTT
CAAGAAGTCATTGAAACCTTCTCTCTGGAAGCAGACTCGTACTGCTTCCGATATG
GTATCGACATCCCGTATCTTAGTTGCAGTAGTGAAGATGTGCTATGAGGCTAAAGAATGG
GATTTACTTAATGAAAAATTATGCTTTTGTCCAAAAGCGGAGTCAAGTAAAAACAAGCT
GTTGCCAAAATGGTTCAACAGTGTACTTATGTTGAGGAAATCACAGACCTTCTATC
AAACTTCGATTAATTGACTCTACGAATGGTTACCGAAGGCAAGATTTATGTTGAAATT
GAGCGTGCAGCTGACTAAAACATTAGCAACTATAAAAGAACAAAATGGTGATGTGAAA
GAGGCAGCTCCATTTTACAGGAGTTACAGGTGGAACCTACGGGTCAATGGAAAAGAAA
GAGCGAGTGGAAATTTATTTGGAGCAAATGAGGCTCTGCCTAGCTGTGAAGGATTACATT
CGAACACAAATCATCAGCAAGAAAATTAACACCAAATTTTCCAGGAAGAAAATACAGAG
AAATTAAGTTGAAGTACTATAATTTAATGATTGAGTCAAGTCAACATGAGGGATCCTAT
TTGTCTATTTGTAAGCACTACAGAGCAATATATGATACTCCCTGTATACAGGCAGAAAGT
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AATGAACAGTCAGATTTGGTTCACCGAATAAGTGGTGACAAGAAGTTAGAAGAAATCCC
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TTTGGTTCTACAGAGGAAGGTGAAAAAGGTTGAAAGACTTGAAGAACAGAGTTGTTGAA
CATAATATTAGAATAATGGCCAAGTATTATACTCGGATAACAATGAAAAGGATGGCACAG
CTTCTGGATCTATCTGTTGATGAGTCCGAAGCCTTCTCTCAAATCTAGTAGTTAAACAAG
ACCATCTTTGCTAAAGTAGACAGATTAGCAGAAATTATCAACTCCAGAGACCCAAGGAT
CCAAATAATTTATTAATGACTGGTCTCAGAAACTGAACCTAATGTTCTCTGGTTAAC
AAAACACGCATCTCATAGCCAAAGAGGAGATGATACATAATCTACAATAA

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Clone variation with respect to NM_002816.3
84 a=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002816 unedited

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TGATTTGTAACGACTTTCTATAGGNNCGGCCGNAATTCGGCACGAGGCGATGGGCT
GCCTGAGCGGGTGCAGCGGCAACTTCCGGTGTGGGTGACGAGTGGTGGCCGAAGCAGGGG
GACAGCAAGGGACGCTCAGGCGGGGACCATGGCGGACGGCGGCTCGGAGCGGGCTGACGG
GCGCATCGTCAAGATGGAGGTGGACTACAGCGCCTCGGTGGATCAGCGCCTTCCCGAGTG
TGCGAAGCTAGCCAAGGAAGGAAGACTTCAAGAAGTATTGAAACCTTCTCTCTGGA
AAAGCAGACTCGTACTGCTTCCGATATGGTATCGACATCCCGTATCTTAGTTGCAGTAGT
GAAGATGTGCTATGAGGCTAAAGAATGGGATTTACTTAATGAAAAATTATGCTTTTGTG
CAAAAGGCGGAGTCAAGTAAAAACAAGCTGTTGCCAAAATGGTTCAACAGTGTGACTTA
TGTTGAGGAAATCACAGACCTTCTATCAAACCTCGATTAATTGATACTCTACGAATGGT
TACCGAAGGCAAGATTTATGTTGAAATGAGCGTGCAGGACTGACTAAAACATTAGCAAC
TATAAAAGAACAAAATGGTGATGTGAAAGAGGCAGCCTCCATTTTACAGGAGTTACAGGT
GGAACCTACGGTCAATGGAAAAGAAAGAGCGAGTGGAAATTTATTTGGAGCAAATGAG
GCTCTGCCTAGCTGTGAAGGATTACATTGAAACCAAATCATCAGCAAGAAAATTAACAC
CAAATTTTTCCAGGAAAGAAATACAGAGAAATTAAGNTGAAGTACTATNATTTAATGAT
TCAGCTGGATCACATGAGGNATCCTATTTGTCTATTTGTAGCACTACAGAGCATATATG
ATACTCCCTGTATACAGCAGAAAGTGAANAATGGCAGCAGGCTCTGAAGAGNGGTGNAC
TCTATGNTATCCTGGCTCCTTNTGACATGACAGTCAGATTGG

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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002816 unedited GCACTTCCAGGTCAGGNANAGCACTGGGGAGGGGTACAGGGATGCCACCCGGGATCTG TTCAGGAAACAGCTATGACCGCGCCGCAATCTAGAGNCGAGNTTTTTTTTTTTTTTTT TTTTTTTTTTAAAAACAGTCTTTTTTAATGACTTCCAATTTAACTTTTTTCTAAAG CACTAAGACCCTTATTGGAGATTATGTATCATCTCCTCTTTGGCTATGAAATGCGTAGTT TTGTTAACAGAGACATTAATGAGTTCAGTTTCTGAGACCAGTCATTTAATAAATTATTT GGATCCTTGGGTCTCGGAAGTTGATAATTCCTGCTAATCTGTCTACTTTAGCAAAGATG GGCTTGTTAACTACTAAATTTGAGAGAAAAGGCTTCGGACTCATCAACAGATAGATCCAGA AGCTGGGCCATCCTTTTCATTGGTATCCGAGTATAATACTTGGCCATTATTCTAATATTA TGTTCAACAACCTGTGTTCTTCAAGTCTTTCCACCTTTTTTTCACCTTCTGTAGAACCA AAAACATCCGTTGCAGGACTCTCAAGGGAACCTTTTCTTAATTCCATTCCATAGCTCTCA ACAAGTGTGGACCAACGCATCAACTCCATTGTGGTAAAAAGCTTTAAAAGATCCTTGAT TTGGGGAATTTCTTCACTTCTGTCCACTTATTTCCGGTGAACCAAATNCTGACTGT TTCATTGTCAAAGGAGCCAGGATAACATAGAGTACAACACTTCTCAGAGCCTGCTGCC ATTTTCACTTTCTGCCTGTATACAGGGGAGTATCATATATTGCTTGTAGTGCTTACA AATAGACAAATAGATCCCTNATGTTGATCCAGCTGAATCATTAAATAAGAACTTCA ACTTTAAATTTCTCTGAATTTCTTCTGAAAAAATTGGGGGTAATTT
Restriction Sites:	NotI-NotI
ACCN:	NM_002816
Insert Size:	1640 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_002816.2</u> , <u>NP_002807.1</u>
RefSeq Size:	3592 bp
RefSeq ORF:	1371 bp
Locus ID:	5718
UniProt ID:	<u>O00232</u>
Cytogenetics:	17q24.2
Domains:	PCI
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 a non-ATPase subunit of the 19S regulator. A pseudogene has been identified on chromosome 3. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015] Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.