

Product datasheet for **RC202307**

PSMD3 (NM_002809) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMD3 (NM_002809) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSMD3
Synonyms:	P58; RPN3; S3; TSTA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC202307 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGCAGGAGGCTCGGCGCGGCCCGCGCGGACAAGGCCAAACCGCCCGCGGAGGAGAAC
 AAGAACCACCGCCCGGCCCGCCAGGATGTGGAGATGAAAGAGGAGGCAGCGACGGGTGGCGGGT
 AACGGGGAGGCAGACGGCAAGACGGCGCGGACGCGGCTGAGCACTCCAGCGAGAGCTGGACACAGT
 ACCTTGGAGGACATCAAGGAGCAGTGAACAGCTAGAGAAAGCGGTTTCAGGCAAGGAGCCGAGATTCTG
 TGCTGCGGGCCCTGCGGATGCTGCCTCCACATCAGCCGCTCAACCACTATGTTCTGTATAAGGCTGT
 GCAGGGCTTCTCACTTCAAATAATGCCACTCGAGACTTTTTGCTCCCCTCCTGGAAGAGCCCATGGAC
 ACAGAGGCTGATTTACAGTTCCTCCCGCACGGGAAAAGCTGCGTGAACACCCCTCTGCCTGAAGTGG
 AAGCCTATCTCCAACCTCTCGTGGTTCATCTTCATGATGAACAGCAAGCGCTACAAAGAGGCACAGAAGT
 CTCTGATGATCTGATGCAGAAGTCACTACTCAGAACCAGCGGGCCCTAGACCTTGTAGCCGAAAGTGT
 TACTATTATCACGCCCGGCTATGAGTTCCTGGACAAGCTGGATGTGGTGCAGCTTCTTGCATGCTC
 GGCTCCGGACAGCTACGCTTCGGCATGACGCAGACGGGACAGGCCACCCTGTTGAACCTCCTGCTCGGAA
 TTACCTACACTACAGCTTGTACGACCAGGCTGAGAAGCTGGTGTCCAAGTCTGTGTTCCAGAGCAGGCC
 AACAAATGAGTGGGCCAGGTACCTCTACTACACAGGGCGAATCAAAGCCATCCAGCTGGAGTACTCAG
 TGGCCCGGAGAACGATGACCAACGCCCTTCGCAAGGCCCTCAGCACACAGCTGTGCGCTTCAAACAGAC
 GGTGCACAAGCTTCTCATCGTGGTGGAGCTGTTGCTGGGGAGATCCCTGACCGGCTGCAGTTCGCCAG
 CCCTCCCTCAAGCGCTCACTCATGCCCTATTTCTTCTGACTCAAGCTGTCAGGACAGGAAACCTAGCCA
 AGTTCAACCAGGCTCTGGATCAGTTTGGGAGAAGTTTCAAGCAGATGGGACCTACACCTAATTATCCG
 GCTGCGGCACAACGTGATTAAGACAGGTGACGCATGATCAGCCTCTCTATTCCCGAATCTCCTTGCT
 GACATCGCCAGAACTGCAAGTGGATAGCCCCGAAGATGCAAGTTCATTGTTGCCAAGGCCATCCGGG
 ATGGTGTCAATGAGGCCAGCATCAACCAGAGAAGGGCTATGTCCAATCCAAGGAGATGATTGACATCTA
 TTCCACCCGAGAGCCCGAGCTAGCCTTCCACCAGCGCATCTCCTTCTGCCTAGATATCCACAACATGTCT
 GTCAAGGCCATGAGGTTTCTCCAAATCGTACAACAAGGACTTGGAGTCTGCAGAGGAACGGCGTGAGC
 GAGAACAGCAGGACTTGGAGTTTCCAAGGAGATGGCAGAAGATGATGATGACAGCTTCCCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202307 protein sequence
 Red=Cloning site Green=Tags(s)

MKQEGSARRRGADKAKPPPGGGEQEP PPPPAPQDVEMKEEAATGGGSTGEADGKTA AAAAEHSQRELDTV
 TLEDIKEHVQLEKAVSGKEPRFVLRALRMLPSTSRRLNHYVLYKAVQGFSTSNNATRDFLLPFLEPM
 TEADLQFRPRTGKAASNTLLPEVEAYLQLLVVI FMMNSKRYKEAQKISDDL MQKISTQNRALDLVAAK
 YYYHARVYEFDLKLDVRSFLHARLRTATLRHDADGQATLLNLLLRNYLHYSLYDQAEKLVSKSVFPEQA
 NNNEWARYLYYTGRKAIQLEYSVARRMTNALRKAPQHTAVGFKQTVHKLLIVVELLLGEIPDRLQFRQ
 PSLKRSLMPYFLLTQAVRTGNLAKFNQVLDQFGEKFQADGTYTLIIRLRHNVIKTGVRMISLSYSRISLA
 DIAQKLQDSPADEFIVAKAIRDGVIEASINHEKGYVQSKEMIDIYSTREPQLAFHQRI SFCLDIHNMS
 VKAMRFPKSYNKDLES AEERREREQQDLEFAKEMAEDDDDSFP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6198_c06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_002809

ORF Size: 1602 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_002809.4](#)

RefSeq Size: 2187 bp

RefSeq ORF: 1605 bp

Locus ID: 5709

UniProt ID: [O43242](#)

Cytogenetics: 17q21.1

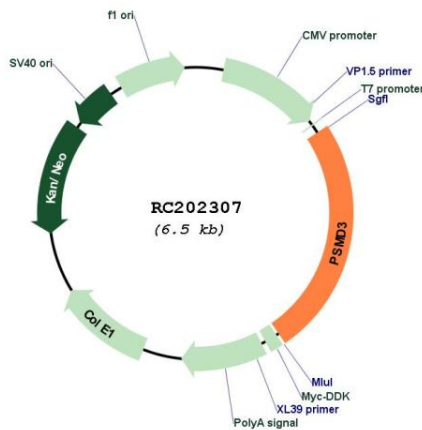
Domains: PCI

Protein Pathways: Proteasome

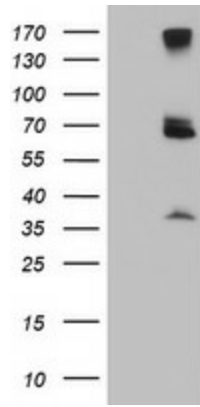
MW: 61 kDa

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. This gene encodes a member of the proteasome subunit S3 family that functions as one of the non-ATPase subunits of the 19S regulator lid. Single nucleotide polymorphisms in this gene are associated with neutrophil count. [provided by RefSeq, Jul 2012]

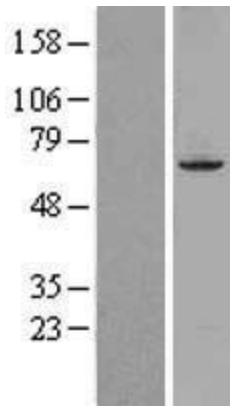
Product images:



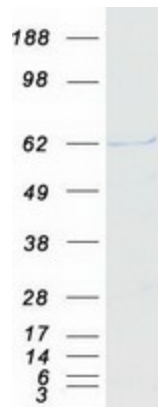
Circular map for RC202307



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PSMD3 (Cat# RC202307, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PSMD3 (Cat# [TA504337]). Positive lysates [LY400996] (100ug) and [LC400996] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400996]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202307 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMD3 protein (Cat# [TP302307]). The protein was produced from HEK293T cells transfected with PSMD3 cDNA clone (Cat# RC202307) using MegaTran 2.0 (Cat# [TT210002]).