

Product datasheet for **RC200903**

PSMD9 (NM_002813) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Tag: Myc-DDK
 Symbol: PSMD9
 Synonyms: p27; Rpn4
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RC200903 representing NM_002813
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCGACGAGGAAGCGAGGCAGAGCGGAGGCTCCTCGCAGGCCGGCGTCGTGACTGTCAGCGACGTCC
 AGGAGCTGATGCGGCGCAAGGAGGAGATAGAAGCGCAGATCAAGGCCAACTATGACGTGCTGAAAGCCA
 AAAAGGCATTGGGATGAACGAGCCGCTGGTGGACTGTGAGGGCTACCCCGGTGACAGCTGGACCTGTAC
 CAAGTCCGACCCAGGCACAACATCATATGCCTGCAGAATGATCACAAGGCAGTGATGAAGCAGGTGG
 AGGAGCCCTGCACCAGCTGCACGCTCGCGACAAGGAGAAGCAGGCCCGGGACATGGCTGAGGCCACAA
 AGAGGCCATGAGCCGCAAACTGGGTGAGAGTGAAGGCCAGGGCCCTCCACGGGCCTTCGCCAAAGTGAAC
 AGCATCAGCCCCGGCTCCCCAGCCAGCATCGCGGGTCTGCAAGTGGATGATGAGATTGTGGAGTTCGGCT
 CTGTGAACACCCAGAACTTCCAGTCACTGCATAACATTGGCAGTGTGGTGCAGCACAGTGAGGGGAAGCC
 CCTGAATGTGACAGTGATCCGACGGGGGAAAAACACCAGCTTAGACTTGTCCAACACGCTGGGCAGGA
 AAAGGACTGCTGGGCTGCAACATTATTCCTCTGCAAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200903 representing NM_002813
 Red=Cloning site Green=Tags(s)

MSDEEARQSGGSSQAGVVTVSDVQELMRRKEEIEAQIKANYDVLESQKIGMNEPLVDCEGYPRSDVDLY
 QVRTARHNIICLQNDHKAVMKQVEEALHQLHARDKEKQARDMAEAKHEAMSRKLGQSESQGPPRAFAKVN
 SISPGSPASIAGLQVDDEIVEFGSVNTQNFQSLHNIIGSVVQHSEKPLNVTVIRRGKQLRRLVPTRWAG
 KGLLGCNIIPLQR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

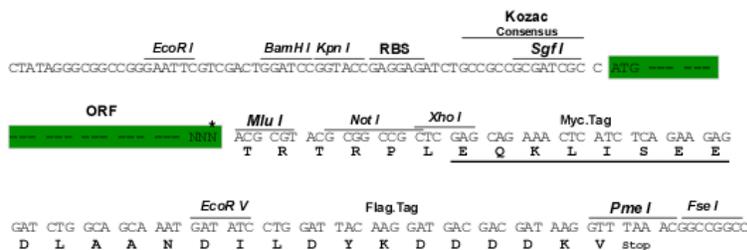
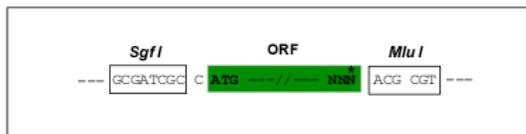


Chromatograms: https://cdn.origene.com/chromatograms/mg2875_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002813

ORF Size: 669 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.

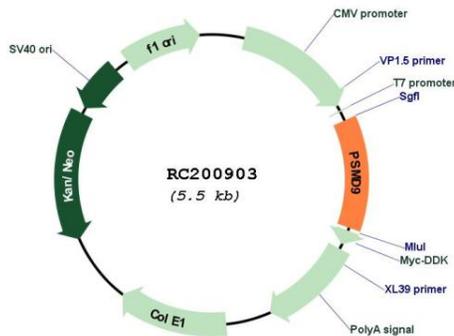
RefSeq: [NM_002813.7](#)

RefSeq Size: 2360 bp

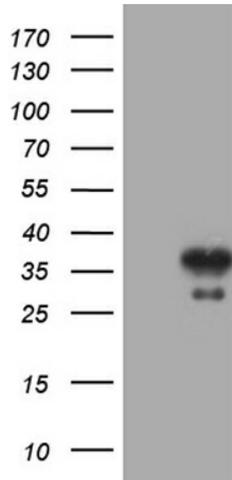
RefSeq ORF: 672 bp
 Locus ID: 5715
 UniProt ID: [O00233](#)
 Cytogenetics: 12q24.31
 Domains: PDZ
 MW: 24.5 kDa

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. 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. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, May 2012]

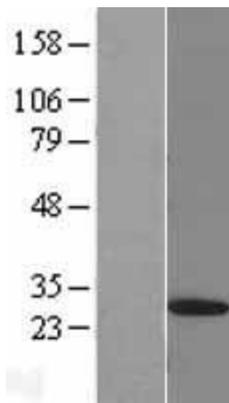
Product images:



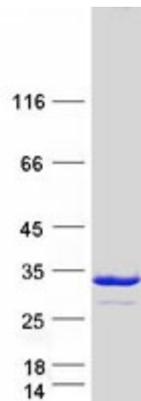
Circular map for RC200903



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PSMD9 (Cat# RC200903, 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-PSMD9 (Cat# [TA810188])(1:2000). Positive lysates [LY419093] (100ug) and [LC419093] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419093]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200903 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMD9 protein (Cat# [TP300903]). The protein was produced from HEK293T cells transfected with PSMD9 cDNA clone (Cat# RC200903) using MegaTran 2.0 (Cat# [TT210002]).