

Product datasheet for **RG210486**

PSMD1 (NM_002807) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | PSMD1 (NM_002807) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | PSMD1 |
| Synonyms: | P112; Rpn2; S1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG210486 representing NM_002807
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATCACCTCGGCCGCTGGAATTATTTCTCTTCTGGATGAAGATGAACACAGCTTAAGGAATTTGCAC
 TACACAAATTGAATGCAGTTGTTAATGACTTCTGGGCAGAAATTTCCGAGTCCGTAGACAAAATAGAGGT
 TTTATACGAAGATGAAGGTTTCCGGAGTCGGCAGTTTGCAGCCTTAGTGGCATCTAAAGTATTTTATCAC
 CTGGGGCTTTTGGAGGCTCTGAATTATGCTCTTGGAGCAGGGGACCTTCAATGTCAATGATAACT
 CTGAATATGTGGAACTATTATAGCAAAATGCATTGATCACTACACAAACAATGTGTGGAAAATGCAGA
 TTTGCCTGAAGGAGAAAAAACCAATTGACCAGAGATTGGAAGGCATCGTAAATAAAATGTTCCAGCGA
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 CCTGATTTTCATCAATGTTTGTGTCAGTGCTTAATTTTCTTAGATGATCCTCAGGCTGTGAGTGATATCTTAG
 AGAAACTGGTAAAGGAAGACAACCTCCTGATGGCATATCAGATTTGTTTTGATTTGTATGAAAGTCTAG
 CCAGCAGTTTTTGTATCTGTAATCCAGAATCTTCAACTGTTGGCACCCCTATTGCTTCTGTGCCTGGA
 TCCACTAATACGGTACTGTTCCGGGATCAGAGAAAGACAGTGACTCGATGGAACAGAGAAAAGACAA
 GCAGTGCAATTTGTAGGAAAGACACCAGAAGCCAGTCCAGAGCCTAAGGACCAGACTTTGAAAATGATTAA
 AATTTTAAAGTGGTAAATGGCTATTGAGTTACATCTGCAGTTCTTAATACGAAACAATAACAGACCTC
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 CAAGATGTTTATGATTTGCTAAAAACAACCTTTATCAGGATGATGCAGTAACAGGGGAAGCAGCTGGCC
 TGGCCCTAGGTTTGGTTATGTTGGGCTCTAAAAATGCTCAGGCTATTGAGGACATGGTTGGTTATGCACA
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 GAACAGTGCCCAAGTGTGTCTTTGTTGTGTCAGAGAGTTACAACCCTCATGTGCCTACGGAGCTGCAA
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 AAGAAGGAAAAAGAAAAGGAAAAAGGAGGAGAAAATGGAAGTGGATGAGGAGAGAAAAAGGAGG
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 CCAGCTTAAGGTCTAACCATGCCGAGACCTGTAGATACCAGCCTTTCAAACCACTCTCTATTGGAGGC
 ATCATCTTCTGAAGGATACCAGTGAAGACATTGAGGAGCTGGTGAACCTGTGGCAGCACATGGCCCAA
 AAATCGAGGAGGAGGAACAAGAGCCAGAACCCCAAGAACCATTTGAGTATATTGATGAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG210486 representing NM_002807
 Red=Cloning site Green=Tags(s)

MITSAAGIISLLDEDEPQLKEFALHKLNAVVNDFAEISESVDKIEVL YEDEGFRSRQFAALVASKVIFYH
 LGAFEEESLNYALGAGDLFNVNDNSEYVETIIAKCIDHYTKQCVENADLPEGEKPIDQRLEGIVNKMFOR
 CLDDHKYKQAIGIALETRRLDVFEKTILESNDVPGMLAYSLKLCMSLMQNKQFRNKVLRVLVKIYMNLEK
 PDFINVCQCLIFLDDPQAVSDILEKLVKEDNLLMAYQICFDLYESASQQFLSSVIQNLRTVGTPIASVPG
 STNTGTVPGEKSDSMETEETSSAFVGKTPEASPEPKDQTLKMIKILSGEMAIELHLQFLIRNNNTDL
 MILKNTKDAVRNSVCHTATVIANSFMHC GTTSDQFLRDNLEWLARATNWAKFTATASLGVIHKGHEKEAL
 QLMATYLPKDTSPGSAYQEGGLYALGLIHANHGDIIDYLLNQLKNASNDIVRHGGSGLGLAAMGTAR
 QDVYDLLKTNLYQDDAVTGEAAGLALGLVMLGSKNAQAIEDMVGYAQETQHEKILRGLAVGIALVMYGRM
 EEADALIESLCRDKDPILRRSGMYTVAMAYCGSGNKAIRRLHVAVSDVNDVRRAAVESLGFILFRTP
 EQCPSVSVLLSESYNPHVRYGAAMALGICCAGTGNKEA INLLEPMTNDPVNYVRQGALIASALIMIQQTE
 ITCPKVNQFRQLYSKVINDKHDDVMKFGAILAQGILDAGGHVNTISLQSRGTGHTHMP SVVGVLVFTQFW
 FWFPLSHFLSLAYTPTCVIGLNKDLKMPKVQYKSNCKPSTFAYPAPLEVPKEKEKEKVSTAVLSITAKAK
 KKEKEKEKEKEEKMVEDEAEKKEKEKKEPEPNFQLLDPARVMPAQLKVLTPETCRYQPFKPLSIGG
 I IILKDTSEDI EELVEPVA AHGPKIEEEEQEPEPEPEFYIDD

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

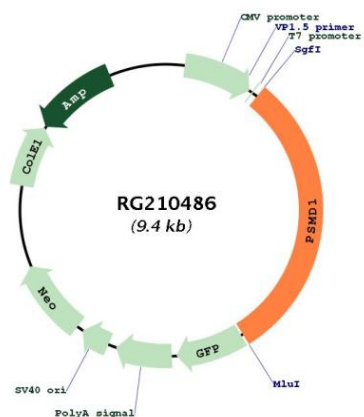


ACCN: NM_002807

ORF Size: 2859 bp

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|-------------------------------|---|
| 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: | <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: | NM_002807.4 |
| RefSeq Size: | 3227 bp |
| RefSeq ORF: | 2862 bp |
| Locus ID: | 5707 |
| UniProt ID: | Q99460 |
| Cytogenetics: | 2q37.1 |
| Domains: | PC_rep |
| Protein Pathways: | Proteasome |
| Gene Summary: | <p>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 the largest non-ATPase subunit of the 19S regulator lid, which is responsible for substrate recognition and binding. There is evidence that this proteasome and its subunits interact with viral proteins, including those of coronaviruses. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Aug 2020]</p> |

Product images:



Circular map for RG210486