

## Product datasheet for **RC218938**

### PSMF1 (NM\_006814) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: PSMF1 (NM\_006814) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: PSMF1  
 Synonyms: PI31  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC218938 representing NM\_006814  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGGCCTGGAGGTACTGTTTCGCATCGGCAGCGCCGGCCATCACCTGCAGGCAGGACGCGCTCGTCT  
 GCTTCTTGCATTGGGAAGTGGTGACACACGGTTACTTCGGCTTGGGTGTCGGTGACCAGCCGGTCCCAA  
 TGATAAGAAGTCAGAAGTCTGCCAGCTGGGTGGAACAACAATAAAGACCTGTATGTCTCCGGTATGAG  
 TATAAGGATGGGTCCAGAAAGCTCCTTGTGAAAGCCATCACCGTGGAGAGCAGCATGATCCTCAATGTGC  
 TGGAAATATGGCTCACAGCAAGTGGCAGACTTGACCCTGAACTTGGATGATTATATCGATGCAGAACACCT  
 GGGTGACTTCCACAGGACCTACAAGAACAGTGAGGAGCTTCGGTCTCGTATTGTGTCTGGAATCATCACA  
 CCTATCCATGAGCAGTGGGAAAAGGCTAATGTAAGCAGTCCCCACCGGGAGTTCCCCCTGCTACCGCCA  
 GAGAGGTGGACCCACTCCGGATTCTCCACGCCACCCACACACAGTCCGGCAGCCTCCCTGGTGTGATCC  
 CCTGGGCCGTTTGTGTGCGGGGAGAAGACTTAGACCCTTTTGGGCCTCGGAGAGGTGGCATGATTGTG  
 GATCCCCCTGAGATCTGGCTTCCAAGAGCACTTATTGACCCTTCTCAGGCCTCCCGAACCGACTTCCTC  
 CAGGCGCTGTGCCCCAGGAGCTCGCTTTGACCCTTTGACCATTGGGACCAGCCACCCGGACCTAA  
 CCCAGACCATCTCCCCCGCCGGCTACGATGACATGTACCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC218938 representing NM\_006814  
 Red=Cloning site Green=Tags(s)

MAGLEVLFAAAPAITCRQDALVCFLHWEVVTHGYFGLGVDQPGPNDKSELLPAGWNNKDLVYLRYE  
 YKDGSRKLLVKAITVESSMILNVLEYGSQQVADLTNLDDYIDAEHLGDFHRTYKNSEELRSRIVSGIIT  
 PIHEQWEKANVSSPHREFPPATAREVDPLRIPRHPHTSRQPPWCDPLGPFVVGEDLDPFGPRRGGMIV  
 DPLRSGFPRALIDPSSGLPNRLPPGAVPPGARFDPFPGPIGTSPPGPNPDHLPPEGVDDMYL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6037\\_h04.zip](https://cdn.origene.com/chromatograms/mk6037_h04.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\_006814

**ORF Size:** 813 bp

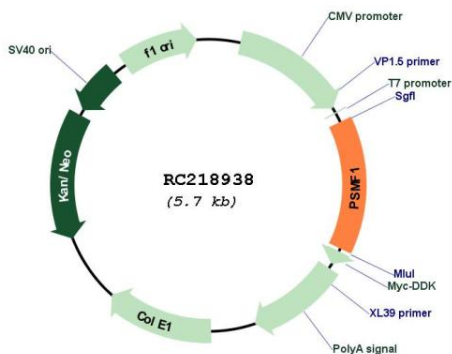
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

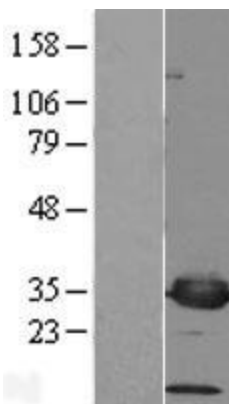
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>RefSeq:</b>                | <a href="#">NM_006814.5</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>RefSeq Size:</b>           | 3241 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>RefSeq ORF:</b>            | 816 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Locus ID:</b>              | 9491                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>UniProt ID:</b>            | <a href="#">Q92530</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cytogenetics:</b>          | 20p13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Pathways:</b>      | Proteasome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>MW:</b>                    | 29.6 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Gene Summary:</b>          | <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 a protein that inhibits the activation of the proteasome by the 11S and 19S regulators. Alternative transcript variants have been identified for this gene. [provided by RefSeq, Jul 2008]</p> |

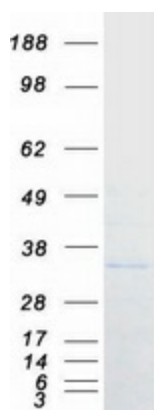
Product images:



Circular map for RC218938



Western blot validation of overexpression lysate (Cat# [LY402038]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218938 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMF1 protein (Cat# [TP318938]). The protein was produced from HEK293T cells transfected with PSMF1 cDNA clone (Cat# RC218938) using MegaTran 2.0 (Cat# [TT210002]).