

## Product datasheet for **MR207012**

### **Psmc1 (NM\_008947) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Psmc1 (NM_008947) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Psmc1
Synonyms:	A1325227; P26s4; rpt2; Rpt2/S4; S4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR207012 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGTCAAAGCCAGAGTGGTGGCCATGGTCTGGGGGTGGCAAGAAGGATGACAAGGACAAGAAAAAGA  
 AATACGAACCTCCTGTCCCAACTAGAGTGGGGAAAAAGAAGAAAACAAGGGACCAGATGCTGCCAG  
 CAAACTGCCACTGGTAACACCTCACACCCAGTGCCGCCTGAAATTAAGCTAGAGAGAATAAAAGAC  
 TATCTTCTCATGGAGGAGGAATTCATTAGAAACCAGGAACAGATGAAACCATTAGAAGAAAAGCAAGAGG  
 AGGAAAGATCAAAGTGGATGATCTCAGGGGGACCCCATGTCTGTAGGAACCTTGAAGAGATCATTGA  
 TGATAATCACGCCATTGTGTCCACATCTGTGGGCTCAGAACACTACGTCAGCATCCTGTCGTTTGTAGAC  
 AAGGATCTGCTGGAACCAGGCTGCTCCGCTCTGCTCAACCACAAGGTGCATGCTGTGATAGGGGTGCTAA  
 TGGATGACACGGATCCCCTGGTACAGTGATGAAGGTGGAAAAGGCCCCAGGAGACCTACGCAGATAT  
 TGGGGGACTGGACAACCAGATCCAAGAAATTAAGGAGTCTGTGGAGCTCCCGCTTACCCATCCTGAGTAT  
 TACGAGGAGATGGGGATAAAGCCCCCTAAGGGGGTCAATCTCTACGGTCCGCCAGGAACAGGTAAAACTC  
 TATTGGCCAAAGCAGTAGCGAACAGACTTCAGCCACTTTCTTGCAGTGGTGGCTCAGAGCTTATCCA  
 GAAGTACCTAGGTGACGGGCCAAAATTGTCCGGGAGCTTCCGGGTCGCTGAGGAGCATGCGCCGTCC  
 ATCGTGTTCAATTGATGAGATCGACGCCATTGGGACAAAAGATATGATTCAAATCTGGAGGTGAGAGAG  
 AAATTCAGCGAACAAATGTTGGAAGTGTGAACAGTGGATGGATTTGATTCGAGGGGAGATGTAAGT  
 TATCATGGCCACAACCGAATAGAACTTTGGATCCAGCACTTACAGGCCAGGCCGATTGACAGAAAG  
 ATCGAGTTCGCCCTGCCGGATGAGAAGACCAAGAAGCGTATCTCCAGATTCACACCAGCAGGATGACAC  
 TGGCTGATGATGAACCTTGGATGACTTGATCATGGCAAAGGATGACCTCTCTGGGGCCGACATCAAGGC  
 AATCTGTACAGAAGCTGGCTTGATGGCCTTGGCGGAACGAGAATGAAAGTAACAAATGAAGACTTCAA  
 AATCTAAAGAGAATGTTCTTTATAAAAAACAAGAAGGCACCCCTGAGGGGCTCTATCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR207012 protein sequence  
 Red=Cloning site Green=Tags(s)

MGQSQSGGHGPGGGKKDDKDKKKKYEPPVPTRVGKKKKTKGPDAAASKLPLVTPHTQCRLKLLKLERIKD  
 YLLMEEEFIRNQEOMKPLEEKQEEERSKVDDLRTGTPMSVGTLEEIIDDNHAIVSTSVGSEHYVSILSFVD  
 KDLLPEGCSVLLNHKVHAVIGVLMDDTDLVTVMKVEKAPQETYADIGGLDNQIQEIKESVELPLTHPEY  
 YEEMGIKPPKGVILYPPGTGKTLAKAVANQTSATFLRVVSGELIQKYLGDGPKLVRELFRVAEEHAPS  
 IVFIDEIDAIGTKRYDSNSGGEREIQRMLELLNQLDGFDSRGDVKIVIMATNRIETLDPALIRPGRIDRK  
 IEFPLPDEKTKRIFQIHTSRMTLADDVTLDDLIMAKDDL SGADIKAICTEAGLMALRERRMKVTNEDFK  
 KSKENVL YKKQEGTPEGLYL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_008947

ORF Size: 1323 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.

RefSeq: [NM\\_008947.3](#), [NP\\_032973.1](#)

RefSeq Size: 1502 bp

RefSeq ORF: 1323 bp

Locus ID: 19179

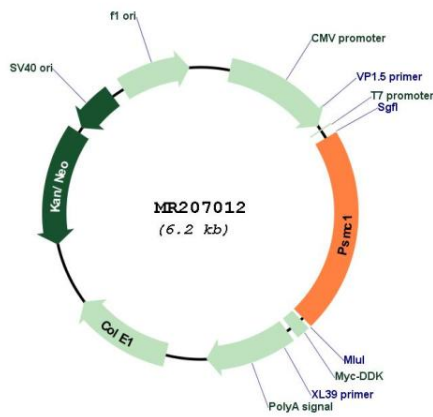
UniProt ID: [P62192](#)

Cytogenetics: 12 50.43 cM

**MW:** 49.2 kDa

**Gene Summary:** Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. PSMC1 belongs to the heterohexameric ring of AAA (ATPases associated with diverse cellular activities) proteins that unfolds ubiquitinated target proteins that are concurrently translocated into a proteolytic chamber and degraded into peptides.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR207012