

## Product datasheet for MR206907

### Psmc2 (BC005462) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Psmc2 (BC005462) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Psmc2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206907 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGGATTACCTAGGTGCGGACCAGCGGAAAACCAAGAGGAGGAGAAGGACGACAAGCCCATCCGAG  
CTCTGGATGAAGGGGATATTGCCTTGCTGAAAACCTACGGCCAGAGTACTTATCAAGGCAGATCAAGCA  
GGTTGAAGATGACATCAACAACCTCTCAAAAAAATAATGAGCTCACTGGTATTAAGAGTCTGACACT  
GGGTTGGCACCTCCGGCCCTCTGGGATTTGGCTGCAGACAAAACAACTTCAGAGTGAACAGCCATTAC  
AGGTGGCAAGATGTACGAAGATAATCAACGCTGATTCGGAGGACCCAAAATACATCATCAATGTGAAGCA  
GTTTGCCAAAGTTCGTGGTGGATCTCAGTGATCAGGTGGCACCCACTGACATTGAAGAAGGGATGAGAGTC  
GGTGTGGACAGAAATAAATACCAAATTCACATTCCACTACCTCCTAAGATCGACCCAACAGTTACCATGA  
TGCAGGTGGAGGAAAAACCCGACGTACATACAGTGATGTTGGTGGTTGAAGGAACAGATTGAGAAATT  
GCGAGAAGTAGTTGAAACCCCTCTGCTCCATCCAGAGAGGTTTGTAAACCTTGAATCGAGCCTCCAAAG  
GGTGTACTGCTGTTGGGCCACCAGGCACAGGCAAGACTCTGTGCTAGGGCAGTTGCCAATCGGACTG  
ATGCTTGCTTCATTGAGTTATTGGGTCTGAGCTCGTACAGAAATACGTCGGCGAGGGAGCTCGAATGGT  
TCGTGAGCTTTTTGAAATGGCCAGGACAAAAAGCCTGCCTATTTTCTTTGATGAAATGATGCCATT  
GGAGGGGCTCGGTTTGACGATGGTGTGGGGTGACAATGAAGTGCAGAGAACCATGCTGGAGCTCATCA  
ATCAGCTGGATGGCTTTGATCCTCGCGCAACATCAAGGTGCTCATGGCCACTAACCGCCCTGACTCT  
GGACCCAGCGCTCATGAGACCGGGGAGGCTGGACAGGAAGATTGAGTTCAGCTTACCTGACTTAGAGGGT  
CGAACGCACATCTTAAGATTCATGCTCGCTCAATGAGTGTGAAAGAGACATTCGATTTGAGCTGTTGG  
CCCGCCTGTGTCCAAACAGTACTGGAGCGGAGATTAGAAGTGTTCACAGAAAGCTGGTATGTTTGAAT  
CCGAGCACGGAGAAAAATTGCTACAGAGAAGGACTTCTTAGAAGCTGTAATAAGGTCATCAAGTCTTAC  
GCCAAATTCAGCGCTACTCCCGCTACATGACATACAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



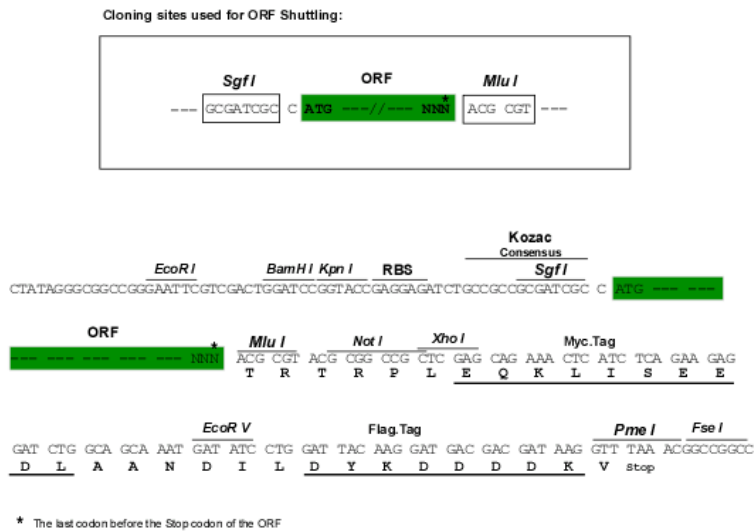
**Protein Sequence:** >MR206907 protein sequence  
Red=Cloning site Green=Tags(s)

MPDYLGADQRKTKEEEKDDKPIRALDEGDIALLKTYGQSTYSRQIKQVEDDIQQLLKKINELTGIKESDT  
 GLAPPALWDLAADKQTLQSEQPLQVARCTKIINADSEDPKYIINVKQFAKFVVDLSDQVAPTDIEEGMRV  
 GVDNRNKYQIHIPLPKIDPTVTMMQVEEKPDVTYSDVGGCKEQIEKLREVVETPLLHPERFVNLGIEPPK  
 GVLLFGPPGTGKTLCARAVANRTDACFIRVIGSELVQKYVGEARMVREL FEMARTKKACLIFDEIDAI  
 GGARFDDGAGGDNEVQRTMLELINQLDGFDPGRGNIKVLMATNRPDTLDPALMRPGRLLDRKIEFSLPDLG  
 RTHIFKIHARMSVERDIRFELLARLCPNSTGAEIRSVCTEAGMFAIRARRKIATEKDFLEAVNKVIKSY  
 AKFSATPRYMTYN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** BC005462

**ORF Size:** 1299 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:** [BC005462](#), [AAH05462](#)

**RefSeq Size:** 1448 bp

**RefSeq ORF:** 1301 bp

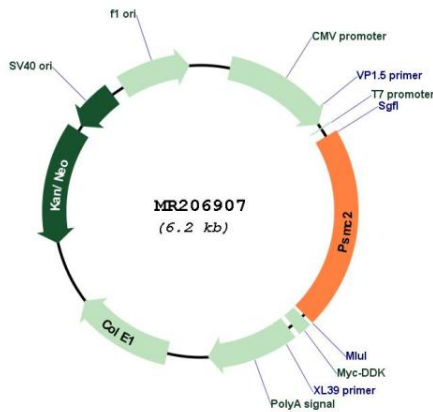
**Locus ID:** 19181

**Cytogenetics:** 5 9.97 cM

**MW:** 48.6 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. PSMC2 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 MR206907