

## Product datasheet for MR202051

### Psmb2 (NM\_011970) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Psmb2 (NM\_011970) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Psmb2  
**Synonyms:** AU045357; AW108089; C7-I; D4Wsu33e; HC7-I  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR202051 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAGTACCTCATTGGCATCCAGGGCCAGACTATGTCCTCGTCGCTCCGACCGAGTGGCCGCCAGCA  
 ATATTGTCCAGATGAAGGACGATCATGACAAGATGTTAAAGATGAGTGAAAAATCTTACTCCTATGTGT  
 TGGAGAGGCTGGAGACACTGTACAGTTTGCAGAATATATCCAGAAAAACGTGCACTTTATAAAAATGCGG  
 AATGGATATGAATTGTCTCCACAGCAGCAGCTAACTTACACGGCGGAACCTGGCTGACTGTCTTCGGA  
 GTCGGACCCCATATCATGTGAACCTCCTCTGGCTGGCTATGACGAGCATGAAGGGCCAGCCCTTACTA  
 CATGGACTACCTGGCAGCCTTGGCTAAGGCTCCTTTTGCAGCTCATGGCTATGGTGCCTTCTGACTCTC  
 AGCATCCTTGACCATACTACACACCTACCATCTCACGTGAGAGGGCAGTGGAGCTTCTTAGGAAGTGTC  
 TGGAGGAGCTCCAGAAGCGCTTCATCTTGAATCTGCCACCTTCAGTGTCCGGGTCATTGACAAAGATGG  
 CATCCACAATCTGGAGAACATTGCCTCCCTAAGCGGGACTCC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR202051 protein sequence  
 Red=Cloning site Green=Tags(s)

MEYLIGIQPDYVLVASDRVAASNIVQMKDDHDKMFKMSEKILLLCVGEAGDTVQFAEYIQKNVQLYKMR  
 NGYELSPATAANFTRRNLDCLRSRTPYHVNL LAGYDEHEGPALYYMDYLAALAKAPFAAHGYGAF LTL  
 SILDRYYTPTISRERAVELLRKCLEELQKRFILNLP TFSVRVIDKDG IHNLENIAFPKRDS

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



[View online »](#)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_011970

**ORF Size:** 606 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\\_011970.4](#), [NP\\_036100.3](#)

**RefSeq Size:** 861 bp

**RefSeq ORF:** 606 bp

**Locus ID:** 26445

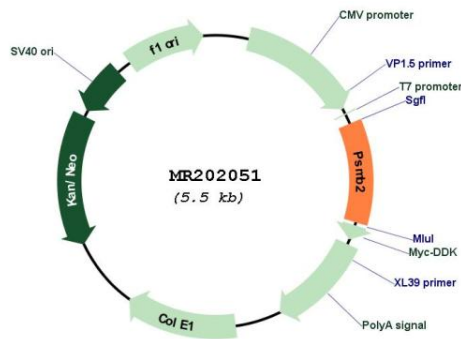
**UniProt ID:** [Q9R1P3](#)

**Cytogenetics:** 4 60.9 cM

**MW:** 22.9 kDa

**Gene Summary:** Component of the 20S core proteasome complex involved in the proteolytic degradation of most intracellular proteins. This complex plays numerous essential roles within the cell by associating with different regulatory particles. Associated with two 19S regulatory particles, forms the 26S proteasome and thus participates in the ATP-dependent degradation of ubiquitinated proteins. The 26S proteasome plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins that could impair cellular functions, and by removing proteins whose functions are no longer required. Associated with the PA200 or PA28, the 20S proteasome mediates ubiquitin-independent protein degradation. This type of proteolysis is required in several pathways including spermatogenesis (20S-PA200 complex) or generation of a subset of MHC class I-presented antigenic peptides (20S-PA28 complex).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR202051