

Product datasheet for **RG220308**

PSMB9 (NM_148954) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PSMB9 (NM_148954) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PSMB9
Synonyms: beta1i; LMP2; MGC70470; PSMB6j; RING12
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG220308 representing NM_148954
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCGGGCGGAGAAGTCCACACCGGGACCACCATCATGGCAGTGGAGTTTGACGGGGCGTTGTGA
TGGTTCTGATCCCGAGTGTCTGCAGGCGAGGCGGTGGTGAACCGAGTGTGGACAAGCTGTCCCGCT
GCACGAGCGCATCTACTGTGCACTCTCTGGTTCAGCTGCTGATGCCCAAGCCGTGGCCGACATGGCCGC
TACCAGCTGGAGCTCCATGGGATAGAAGTGGAGGAACCTCCACTTGTTTTGGCTGCTGCAATGTGGTGA
GAAATATCAGCTATAAATATCGAGAGGACTTGTCTGCACATCTCATGGTAGCTGGCTGGGACCAACGTGA
AGGAGGTCAGGTATATGGAACCTGGGAGGAATGCTGACTCGACAGCCTTTGCCATTGGTGGCTCCGGC
AGCACCTTATCTATGGTTATGTGGATGCAGCATATAAGCCAGGCATGTCTCCCGAGGAGTGCAGGGCT
TCACCACAGACGCTATTGCTCTGGCCATGAGCCGGGATGGCTCAAGCGGGGTGTCATCTACCTGGTCAC
TATTACAGCTGCCGGTGTGGACCATCGAGTCATCTTGGGCAATGAACTGCCAAAATTCTATGATAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG220308 representing NM_148954
Red=Cloning site Green=Tags(s)

MLRAGEVHTGTTIMAVEFDGGVVMGSDSRVSAGEAVVNRVFDKLSPLHERIYCALSGSAADAQAVADMAA
YQLELHGIELEPPPLVLAANVVRNISIYKYREDLSAHLMVAGWDQREGGQVYGTLLGMLTRQPF AIGGSG
STFIYGYVDAAYKPGMSPEECRRFTTDAIALAMSRDGSSGGVIYLVITAAAGVDHRVILGNELPKFYDE

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

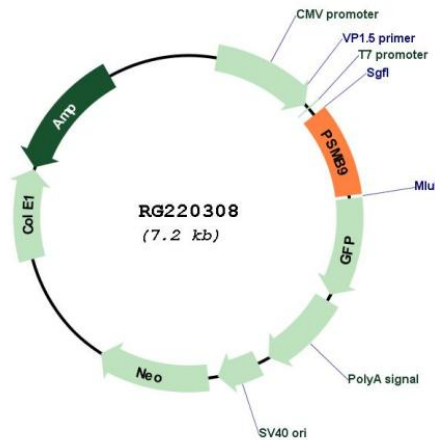


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Cloning Scheme:



Plasmid Map:



ACCN: NM_148954

ORF Size: 627 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:	<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:	<u>NM_148954.2, NP_683756.1</u>
RefSeq Size:	1018 bp
RefSeq ORF:	629 bp
Locus ID:	5698
Cytogenetics:	6p21.32
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Proteasome
Gene Summary:	<p>The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure 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. 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 member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. This gene is located in the class II region of the MHC (major histocompatibility complex). Expression of this gene is induced by gamma interferon and this gene product replaces catalytic subunit 1 (proteasome beta 6 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. [provided by RefSeq, Mar 2010]</p>