

Product datasheet for **RG203422**

PSMG2 (NM_020232) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PSMG2
Synonyms:	CLAST3; HCCA3; HsT1707; MDS003; PAC2; TNFSF5IP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG203422 representing NM_020232
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTTCGTTCCCTGCGGGGAGTCGGCCCCGACCTTGCCGGCTTCACCCTCCTAATGCCAGCAGTATCTG
TTGGAATGTTGGCCAGCTTGCAATGGATCTGATTATTTCTACACTGAATATGTCTAAGATTGGTTACTT
CTATACCGATTGCTTGTGCCAATGGTTGAAACAATCCATATGCGACCACAGAAGGAAATCAACAGAA
CTTAGCATAAATGCTGAAGTGATTCATTGCCTTCAAGAAAGCTGGTGGCTCTACAGTTAAGATCCATTT
TTATTAAGTATAAATCAAAGCCGTTCTGTGAAAACTGCTTTCCTGGGTGAAAAGCAGTGGCTGTGCCAG
AGTCATTGTTCTTTCAAGCAGTCATTCATATCAGCGTAATGATCTGCAGCTTCGTAGTACTCCCTTCCGG
TACCTACTTACACCTTCATGCAAAAAAGTGTCAAATAAAATAAAGAGCCTTAAGTGGGAAGAAATGG
AAAAAGCCGGTGCATTCTGAAATAGATGATTCCGAGTTTGTATCCGCATTCCGGGAGGAGGTATCAC
AAAACACTCTATGATGAAAGCTGTTCTAAAGAAATCCAAATGGCAGTTCTGCTGAAATTTGTTTCAGAA
GGGGACAACATCCCAGATGCATTAGGTCTTGTTGAGTATCTTAATGAGTGGCTTCAGATACTCAAACCAC
TTAGCGATGACCCACAGTATCTGCCTCACGGTGGAAAATACCAAGTTCTTGGAGATTACTTTTGGCAG
TGGTCTTCCCCCTGCACTTTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG203422 representing NM_020232

Red=Cloning site Green=Tags(s)

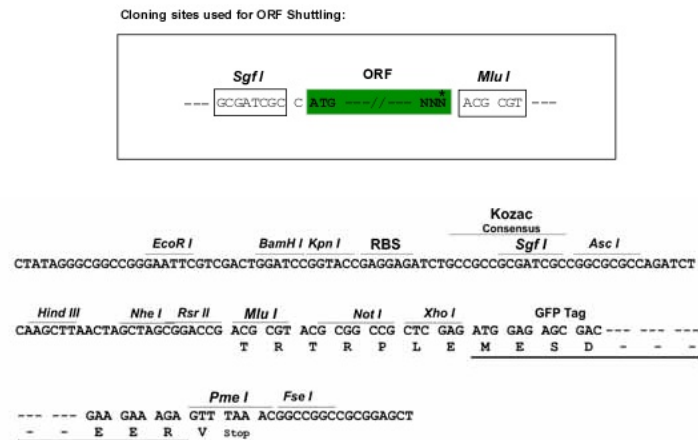
MFVPCGESAPDLAGFTLLMPAVSVGNVQLAMDLIISTLNMSKIGYFYTDCLVPMVGNNPYATTEGNSTE
LSINAEVYSLPSRKLVALQLRSIFIKYKSKPFCEKLLSWVKSSGCARVIVLSSSHSYQRNDLQLRSTPFR
YLLTPSMQKSVQNKIKSLNWEEMKSRCEIDDSEFCIRIPGGGITKTLYDESCSKEIQMAVLLKFVSE
GDNIPDALGLVEYLNWLQILKPLSDDPTVSASRWKIPSSWRLLFGSGLPPALF

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_020232

ORF Size:

792 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_020232.3](#), [NP_064617.2](#)

RefSeq Size: 1064 bp

RefSeq ORF: 795 bp

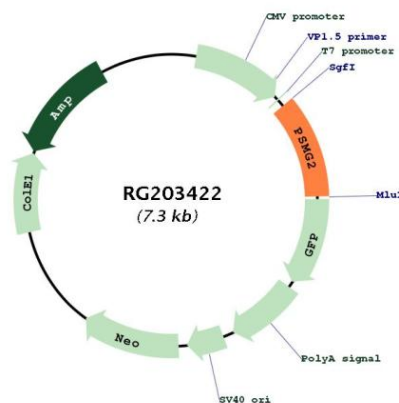
Locus ID: 56984

UniProt ID: [Q969U7](#)

Cytogenetics: 18p11.21

Gene Summary: Chaperone protein which promotes assembly of the 20S proteasome as part of a heterodimer with PSMG1. The PSMG1-PSMG2 heterodimer binds to the PSMA5 and PSMA7 proteasome subunits, promotes assembly of the proteasome alpha subunits into the heteroheptameric alpha ring and prevents alpha ring dimerization.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG203422