

Product datasheet for **RG224611**

PSMB8 (NM_148919) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMB8 (NM_148919) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PSMB8
Synonyms:	ALDD; D6S216; D6S216E; JMP; LMP7; NKJO; PRAAS1; PSMB5i; RING10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG224611 representing NM_148919 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCTACTAGATGTATGCGGAGCCCCGAGGGCAGCGCCGGAATCGGCTCTCCGGTTGCGGGAA
GCGGGCGTCGCTCGGACCCAGGACTACAGTTTCTCTATGCGATCTCCAGAGCTCGTTTACCCCGGG
AATGCAGCCACAGAATCTTCCAGTCCCTGGGTGGGACGGAGAAAGGAACGTTTCAGATTGAGATGGCC
CATGGCACCACCAGCTCGCCTCAAGTCCAGCATGGAGTGATTGCAGCAGTGGATTCTCGGGCCTCAG
CTGGGTCTACATTAGTGCCTTACGGGTGAACAAGGTGATTGAGATTAACCTTACCTGCTTGGCACCAT
GTCTGGCTGTGCAGCAGACTGTCACTACTGGGAGCGCCTGCTGGCCAAGGAATGCAGGCTGTACTATCTG
CGAAATGGAGAACGTATTTCAAGTGTGCGCAGCCTCCAAGCTGCTGTCCAACATGATGTGCCAGTACCGGG
GCATGGGCCTCTCTATGGGCAGTATGATCTGTGGCTGGGATAAGAAGGGTCTGGACTCTACTACGTGGA
TGAACATGGGACTCGGCTCTCAGGAAATATGTTCTCCACGGGTAGTGGGAACACTTATGCCTACGGGGTC
ATGGACAGTGGCTATCGGCCTAATCTTAGCCCTGAAGAGGCTATGACCTTGGCCGAGGGCTATTGCTT
ATGCCACTCACAGAGACAGCTATTCTGGAGCGTTGTCAATATGTACCACATGAAGGAAGATGGTTGGGT
GAAAGTAGAAAGTACAGATGTCAGTGACCTGCTGCACCAGTACCGGAAGCCAATCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG224611 representing NM_148919
Red=Cloning site Green=Tags(s)

MALLDVCGAPRGQRPEALPVAGSGRRSDPGHYSFSMRSPELALPRGMQPTTEFFQSLGGDGERNVQIEMA
 HGTTTTLAFKFQHGVIAAVDSRASAGSYISALRVNKVIEINPYLLGTMSGCAADCQYWERLLAKECRLYYL
 RNGERISVSAASKLLSNMMCQYRGMGLSMGSMICGWDDKKGPLYYVDEHGTRLSGNMFSTGSGNTYAYGV
 MDSGYRPNLSPEEAYDLGRRAIAYATHRDSYSGVVNMYHMKEDGWVKVESTDVSDLLHQYREANQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_148919

ORF Size: 828 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_148919.4](#)

RefSeq Size: 1135 bp

RefSeq ORF: 831 bp

Locus ID: 5696

UniProt ID: [P28062](#)

Cytogenetics: 6p21.32

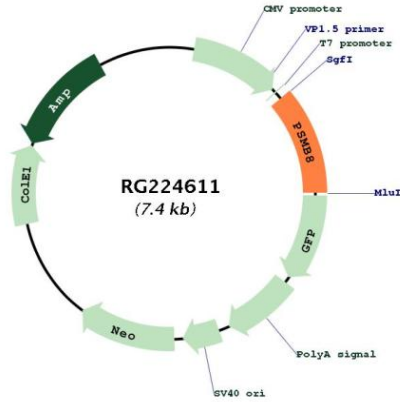
Domains: proteasome

Protein Families: Druggable Genome, Protease

Protein Pathways: Proteasome

Gene Summary: 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 3 (proteasome beta 5 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. Two alternative transcripts encoding two isoforms have been identified; both isoforms are processed to yield the same mature subunit. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG224611