

Product datasheet for **RG201296**

PSMB3 (NM_002795) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PSMB3 (NM_002795) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PSMB3
Synonyms: HC10-II
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG201296 representing NM_002795
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCTATTATGTCCTATAACGGAGGGGCCGTCATGGCCATGAAGGGGAAGAACTGTGTGGCCATCGCTG
 CAGACAGGCGCTTCGGATCCAGGCCAGATGGTGACCACGGACTTCCAGAAGATCTTCCCATGGGTGA
 CCGGCTGTACATCGGTCTGGCCGGCTCGCCACTGACGTCCAGACAGTTGCCAGCGCTCAAGTCCGG
 CTGAACCTGTATGAGTTGAAGGAAGTCCGCAGATCAAACCTTATACCCTCATGAGCATGGTGGCAACC
 TCTTGTATGAGAAACGGTTTGGCCCTTACTACACTGAGCCAGTCATTGCCGGTTGGACCCGAAGACCTT
 TAAGCCCTTCATTTGCTCTCTAGACCTCATCGGCTGCCCATGGTGACTGATGACTTTGTGGTCAGTGGC
 ACCTGCGCCGAACAAATGTACGGAATGTGTGAGTCCCTCTGGGAGCCCAACATGGATCCGGATCACCTGT
 TTGAAACCATCTCCCAAGCCATGCTGAATGCTGTGGACCGGGATGCAGTGTGAGGCATGGGATCATTGT
 CCACATCATCGAGAAGGACAAAAACACCACCAGGACACTGAAGGCCCGAATGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201296 representing NM_002795
 Red=Cloning site Green=Tags(s)

MSIMSNGGAVMAMKGNCAVAIAADRRFGIQAQMVTDFQKIFPMGDRLYIGLAGLATDVQTVARLKF
 LNLVELKEGRQIKPYTLMMSVANLLYEKRFGPYYTEPVIAGLDPKTFKPFICSLDLIGCPMVTDDFVVS
 TCAEQMYGMCESLWEPNMDPHLFETISQAMLNAVDRDAVSGMGVIVHIEKDKITRRTLKARMD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:


ACCN: NM_002795

ORF Size: 615 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_002795.4](#)

RefSeq Size: 784 bp

RefSeq ORF: 618 bp

Locus ID: 5691

UniProt ID: [P49720](#)

Cytogenetics: 17q12

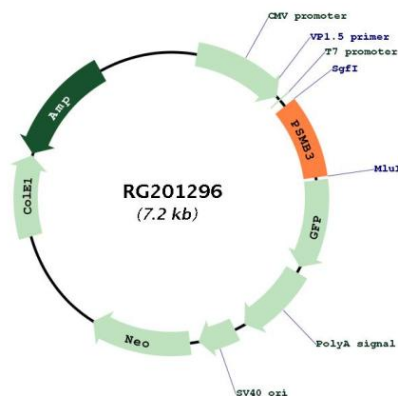
Domains: proteasome

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. The 26 S proteasome may be involved in trinucleotide repeat expansion, a phenomenon which is associated with many hereditary neurological diseases. Pseudogenes have been identified on chromosomes 2 and 12. Alternative splicing results in multiple transcript variants [provided by RefSeq, Sep 2013]

Product images:



Circular map for RG201296