OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG201799

Proteasome 20S beta 7 (PSMB7) (NM_002799) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Proteasome 20S beta 7 (PSMB7) (NM_002799) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Proteasome 20S beta 7
Synonyms:	Z
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG201799 representing NM_002799
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCTGTGTCGGTGTATGCTCCACCAGTTGGAGGCTTCTCTTTTGATAACTGCCGCAGGAATGCCG
TCTTGGAAGCCGATTTTGCAAAGAGGGGATACAAGCTTCCAAAGGCCCGGAAAACTGGCACGACCATCGC
TGGGGTGGTCTATAAGGATGGCATAGTTCTTGGAGCAGATACAAGAGCAACTGAAGGGATGGTTGTTGCT
GACAAGAACTGTTCAAAAATACACTTCATATCTCCTAATATTTATTGTTGTGGTGCTGGGACAGCTGCAG
ACACAGACATGACAACCCAGCTCATTTCTTCCAACCTGGAGCTCCACTCCCTCTCCACTGGCCGTCTTCC
CAGAGTTGTGACAGCCAATCGGATGCTGAAGCAGATGCTTTTCAGGTATCAAGGTTACATTGGTGCAGCC
CTAGTTTTAGGGGGAGTAGATGTTACTGGACCTCACCTCTACAGCATCTATCCTCATGGATCAACTGATA
AGTTGCCTTATGTCACCATGGGTTCTGGCTCCTTGGCAGCAATGGCTGTATTTGAAGATAAGTTTAGGCC
AGACATGGAGGAGGAGGAAGCCAAGAATCTGGTGAGCGAAGCCATCGCAGCTGGCATCTTCAACGACCTG
GGCTCCGGAAGCAACATTGACCTCTGCGTCATCAGCAAGAACAAGCTGGATTTTCTCCGCCCATACACAG
TGCCCAACAAGAAGGGGACCAGGCTTGGCCGGTACAGGTGTGAGAAAGGGACTACTGCAGTCCTCACTGA
GAAAATCACTCCTCTGGAGATTGAGGTGCTGGAAGAAACAGTCCAAACAATGGACACTTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

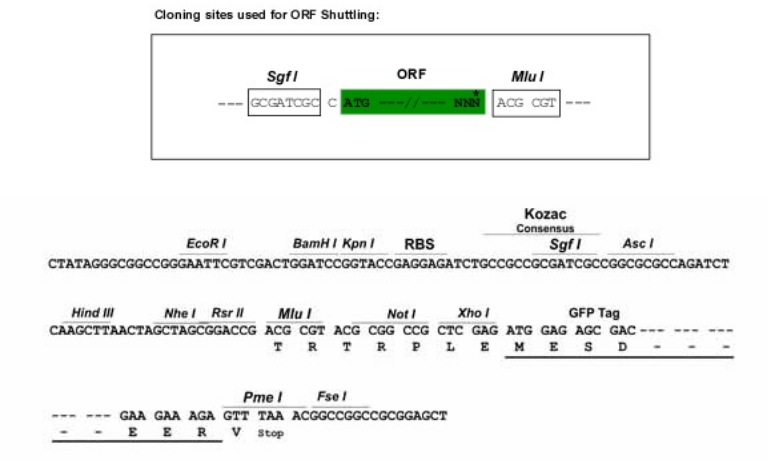
>RG201799 representing NM_002799
Red=Cloning site Green=Tags(s)

MAAVSVYAPPVGGFSFDNCRRNAVLEADFAKRGYKLPKARKTGTTIAGVVYKDGIVLGADTRATEGMVVA
DKNCSKIHFISPNIYCCGAGTAADTDMTTQLISSNLELHSLSTGRLPRVVTANRMLKQMLFRYQGYIGAA
LVLGGVDVTGPHLYSIYPHGSTDKLPYVTMGSGSLAAMAVFEDKFRPDMEEEEAKNLVSEAIAAGIFNDL
GSGSNIDLCVISKNKLDFLRPYTVPNKKGTRLGRYRCEKGTTAVLTEKITPLEIEVLEETVQTMDTS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002799

ORF Size: 831 bp

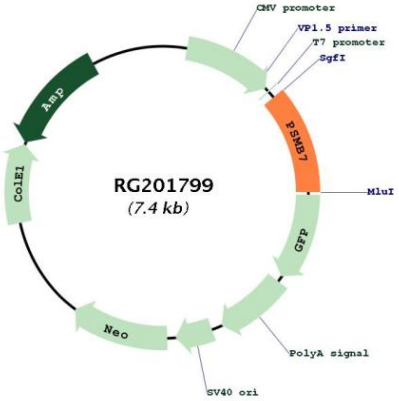
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_002799.2, NP_002790.1
RefSeq Size:	1012 bp
RefSeq ORF:	834 bp
Locus ID:	5695
UniProt ID:	Q99436
Cytogenetics:	9q33.3
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. The encoded protein is a member of the proteasome B-type family, also known as the T1B family, and is a 20S core beta subunit in the proteasome. Expression of this catalytic subunit is downregulated by gamma interferon, and proteolytic processing is required to generate a mature subunit. A pseudogene of this gene is located on the long arm of chromosome 14. [provided by RefSeq, Jul 2012]

Product images:



Circular map for RG201799