

## Product datasheet for **RG204932**

### Tbp7 (PSMC4) (NM\_006503) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tbp7 (PSMC4) (NM_006503) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tbp7
Synonyms:	MIP224; RPT3; S6; TBP-7; TBP7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204932 representing NM_006503 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGAGATAGGCATCTTGGTGGAGAAGGCTCAGGATGAGATCCCAGCACTGTCCGTGTCCGGCCCC  
AGACCGGCCTGTCCTTCTGGGCCCTGAGCCTGAGGACCTGGAGGACCTGTACAGCCGCTACAAGAAGCT  
GCAGCAAGAGCTGGAGTTCTGGAGGTGACGAGGAATACATCAAAGATGAGCAAAAGAACTGAAAAAG  
GAATTTCTCCATGCCAGGAGGAGTGAAGCGAATCAAAGCATCCGCTGGTCATCGGACAATTTCTGG  
AGGCTGTGGATCAGAATACAGCCATCGTGGGCTCTACCACAGGCTCCAATATTATGTGCGCATCCTGAG  
CACCATCGATCGGAGCTGCTCAAGCCCAACGCCCTCAGTGGCCCTCCACAAGCACAGCAATGCACTGGTG  
GACGTGTGCCCCCGAAGCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGCCAGATGTGATGT  
ACGCGGACATCGGAGGCATGGACATCCAGAAGCAGGAGGTGCGGGAGGCCGTGGAGCTCCCGCTCACGCA  
TTTCGAGCTCTACAAGCAGATCGGCATCGATCCCCCGAGGCGTCTCATGTATGGCCACCTGGCTGT  
GGGAAGACCATGTTGGCAAAGGCGGTGGCACATCACACAACAGCTGCATTATCCGGGTGCTGGGCTCGG  
AGTTTGTACAGAAGTATCTGGGTGAGGGCCCCGCATGGTCCGGGATGTGTTCCGCTGGCCAAGGAGAA  
TGCACCTGCCATCATCTTCATAGACGAGATTGATGCCATCGCCACCAAGAGATTGATGCTCAGACAGGG  
GCCGACAGGGAGGTTAGAGGATCCTGCTGGAGCTGCTGAATCAGATGGATGGATTGATCAGAATGTCA  
ATGTCAAGGTAATCATGGCCACAAACAGAGCAGACACCTGGATCCGGCCCTGCTACGGCCAGGACGGCT  
GGACCGTAAAATTGAATTTCACTTCTGACCGCGCCAGAAGAGATTGATTTTCTCACTATCACTAGC  
AAGATGAACCTCTCTGAGGAGGTTGACTTGAAGACTATGTGGCCCGGCCAGATAAGATTTCAGGAGCTG  
ATATTAACCTCCATCTGTGAGGAGAGTGAATGTTGGCTGTCCGTGAAAACCGCTACATTGCTGCGCAA  
GGACTTCGAGAAAGCATACAAGACTGTCATCAAGAAGGACGAGCAGGAGCATGAGTTTTACAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG204932 representing NM\_006503  
 Red=Cloning site Green=Tags(s)

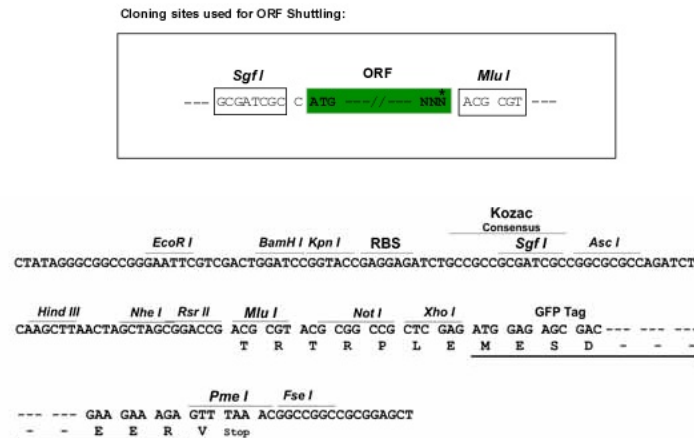
MEEIGILVEKAQDEIPALSVSRPQTGLSFLGPEPEDLEDLYSRYKKLQQELEFLEVQEEYIKDEQKNLKK  
 EFLHAQEEVKRIQSIPLVIGQFLEAVDQNTAIVGSTTGSNYYVRILSTIDRELLKPNASVALHKHSNALV  
 DVLPEADSSIMMLTSDQKPDVMIYADIGGMDIQKQEVREAVELPLTHFELYKQIGIDPPRGVLMYGPPGC  
 GKTMLAKAVAHHTTAAFIRVVGSEFVQKYLGEPRMVRDVFR LAKENAPIIFIDEIDAIAIKRFDQTG  
 ADREVQRILLELLNQMDGFDQNVNVKVI MATNRADTLDPALLRPGR LDRKIEFPLPDRRQKRLIFSTITS  
 KMNLSEEVDLEDYVARPDKISGADINSICQESGMLAVRENRYIVLAKDFEKAYKTVIKKDEQEHEFYK

TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006503

**ORF Size:** 1254 bp

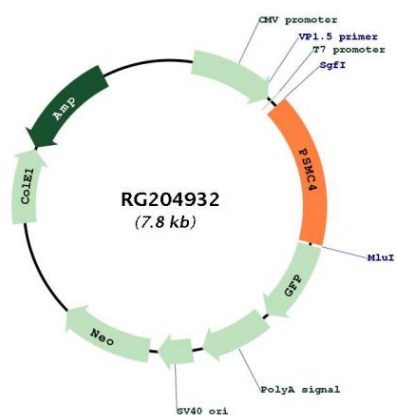
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_006503.4</u>
<b>RefSeq Size:</b>	1450 bp
<b>RefSeq ORF:</b>	1257 bp
<b>Locus ID:</b>	5704
<b>UniProt ID:</b>	<u>P43686</u>
<b>Cytogenetics:</b>	19q13.2
<b>Domains:</b>	AAA, AAA
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Proteasome
<b>Gene Summary:</b>	<p>The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core 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. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase 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. This gene encodes a member of the triple-A family of ATPases that is a component of the 19S regulatory subunit and plays a role in 26S proteasome assembly. The encoded protein interacts with gankyrin, a liver oncoprotein, and may also play a role in Parkinson's disease through interactions with synphilin-1. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jul 2012]</p>

## Product images:



Circular map for RG204932