

Product datasheet for RC204932

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:	Myc-DDK
Symbol:	Tbp7
Synonyms:	MIP224; RPT3; S6; TBP-7; TBP7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204932 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAGATAGGCATCTTGGTGGAGAAGGCTCAGGATGAGATCCCAGCACTGTCCGTGTCCGGCCCC
AGACCGGCCTGTCCTTCTGGGCCCTGAGCCTGAGGACCTGGAGGACCTGTACAGCCGCTACAAGAAGCT
GCAGCAAGAGCTGGAGTTCCTGGAGGTGCAGGAGGAATACATCAAAGATGAGCAAAAGAACCTGAAAAAG
GAATTTCTCCATGCCAGGAGGAGTGAAGCGAATCAAAGCATCCCGCTGGTCATCGGACAATTTCTGG
AGGCTGTGGATCAGAATACAGCCATCGTGGGCTCTACCACAGGCTCCAATATTATGTGCGCATCCTGAG
CACCATCGATCGGGAGCTGCTCAAGCCCAACGCCTCAGTGGCCCTCCACAAGCACAGCAATGCACTGGTG
GACGTGCTGCCCCCGAAGCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGCCAGATGTGATGT
ACGCGGACATCGGAGGCATGGACATCCAGAAGCAGGAGGTGCGGGAGGCCGTGGAGCTCCCGCTCACGCA
TTTCGAGCTCTACAAGCAGATCGGCATCGATCCCCCGAGGCGTCTCATGTATGGCCACCTGGCTGT
GGGAAGACCATGTTGGCAAAGGCGGTGGCACATCACACAACAGCTGCATTCATCCGGTTCGTGGGCTCGG
AGTTTGTACAGAAGTATCTGGGTGAGGGCCCCCGCATGGTCCGGGATGTGTTCCGCTGGCCAAGGAGAA
TGCACCTGCCATCATCTCATAGACGAGATTGATGCCATCGCCACCAAGAGATTGATGCTCAGACAGGG
GCCGACAGGGAGGTTAGAGGATCCTGCTGGAGCTGCTGAATCAGATGGATGGATTTGATCAGAATGTCA
ATGTCAAGGTAATCATGGCCACAACAGAGCAGACACCCTGGATCCGGCCCTGCTACGGCCAGGACGGCT
GGACCGTAAAATTGAATTTCCACTTCTGACCGCCGCGCAGAAGAGATTGATTTTCTCCACTATCACTAGC
AAGATGAACCTCTCTGAGGAGTTGACTTGAAGACTATGTGGCCCGCCAGATAAGATTTGAGGAGCTG
ATATTAACCTCCATCTGTGAGGAGTGAATGTTGGCTGTCCGTGAAAACCGCTACATTGCTGCTGGCCAA
GGACTTCGAGAAAGCATAACAAGACTGTCATCAAGAAGGACGAGCAGGAGCATGAGTTTTACAAG

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204932 protein sequence
 Red=Cloning site Green=Tags(s)

MEEIGILVEKAQDEIPALSVSRPQTGLSFLGPEPEDELDLYSRYKKLQQELEFLEVQEEYIKDEQKNLKK
 EFLHAQEEVKRIQSIPLVIGQFLEAVDQNTAIVGSTTGSNYYVIRILSTIDRELLKPNASVALHKHSNALV
 DVLPEADSSIMMLTSDQKPDVMYADIGGMDIQKQEVREAVELPLTHFELYKQIGIDPPRGVLMYGPPGC
 GKTM LAKAVAHHTTAAFIRVVGSEFVQKYLGEPRMVRDVFRLAKENAPAIIFIDEIDAIATKRFDAQTG
 ADREVQRILLELLNQMDGFDQNVNVKVI MATNRADTLDPALLRPGLDRKIEFPLPDRRQKRLIFSTITS
 KMNLSEEVDLEDYVARPDKISGADINSICQESGMLAVRENRYIVLAKDFEKAYKTVIKKDEQEHEFYK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6175_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

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).

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_006503.4](#)

RefSeq Size: 1914 bp

RefSeq ORF: 1257 bp

Locus ID: 5704

UniProt ID: [P43686](#)

Cytogenetics: 19q13.2

Domains: AAA, AAA

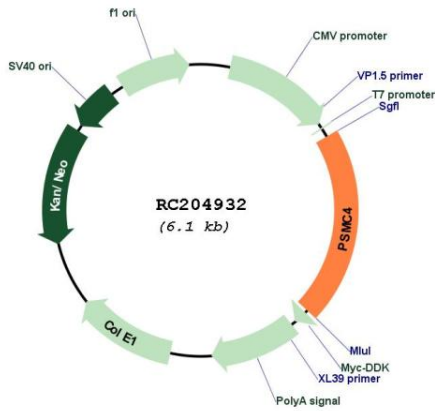
Protein Families: Druggable Genome

Protein Pathways: Proteasome

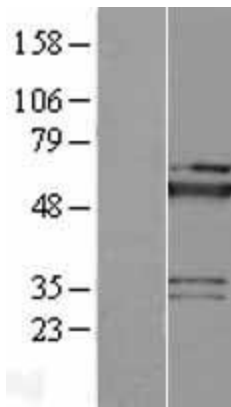
MW: 47.4 kDa

Gene Summary: 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]

Product images:



Circular map for RC204932



Western blot validation of overexpression lysate (Cat# [LY401949]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204932 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMC4 protein (Cat# [TP304932]). The protein was produced from HEK293T cells transfected with PSMC4 cDNA clone (Cat# RC204932) using MegaTran 2.0 (Cat# [TT210002]).