

Product datasheet for RC202809

PSMC6 (NM_002806) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMC6 (NM_002806) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSMC6
Synonyms:	p42; RPT5; SUG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202809 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGACCCTAGAGATAAGGCGCTTCAGGACTACCGCAAGAAGTTGCTTGAACACAAGGAGATCGACG
GCCGTCTTAAGGAGTTAAGGGAACAATAAAAGAATTACCAAGCAGTATGAAAAGTCTGAAAATGATCT
GAAGGCCCTACAGAGTGTGGGCAGATCGTGGTGAAGTGCTTAAACAGTAACTGAAGAAAAATTCATT
GTTAAAGCTACCAATGGACCAAGATATGTTGTGGTGTGCGTCGACAGCTTGACAAAAGTAAGCTGAAGC
CAGGAACAAGAGTTGCTTTGGATATGACTACACTAACTATCATGAGATATTTGCCGAGAGAGGTGGATCC
ACTGGTTTATAACATGTCTCATGAGGACCCTGGGAATGTTTCTATTCTGAGATTGGAGGCTATCAGAA
CAGATCCGGGAATTAAGAGAGGTGATAGAATTACCTTACAAAACCCAGAGTTATTTTCAGCGTGTAGGAA
TAATACCTCCAAAAGGCTGTTTGTATATGGACCACCAGGTACGGGAAAAACACTCTTGGCACGAGCCGT
TGCTAGCCAGCTGGACTGCAATTTCTTAAAGGTTGATCTAGTCTATTGTAGACAAGTACATTTGTTGAA
AGTGCTCGTTTGATCAGAGAAATGTTTAAATATGCTAGAGATCATCAACCATGCATCATTTTTATGGATG
AAATAGATGCTATTGGTGGTCGTCGGTTTTCTGAGGGTACTTCAGCTGACAGAGAGATTCAGAGAACGTT
AATGGAGTTACTGAATCAAATGGATGGATTTGATACTCTGCATAGAGTTAAAATGATCATGGCTACAAAC
AGACCAGATACACTGGATCCTGCTTTGCTGCGTCCAGGAAGATTAGATAGAAAAATACATATTGATTTGC
CAAATGAACAAGCAAGATTAGACATACTGAAAATCCATGCAGGTCCCATTACAAAAGCATGGTGAATAGA
TTATGAAGCAATTGTGAAGCTTTTCGGATGGCTTAAATGGAGCAGATCTGAGAAATGTTTGTACTGAAGCA
GGTATGTTGCAATTCGTGCTGATCATGATTTGTAGTACAGGAAGACTTCATGAAAGCAGTCAGAAAAG
TGGCTGATTCTAAGAAGCTGGAGTCTAAATTGGACTACAAACCTGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202809 protein sequence
Red=Cloning site Green=Tags(s)

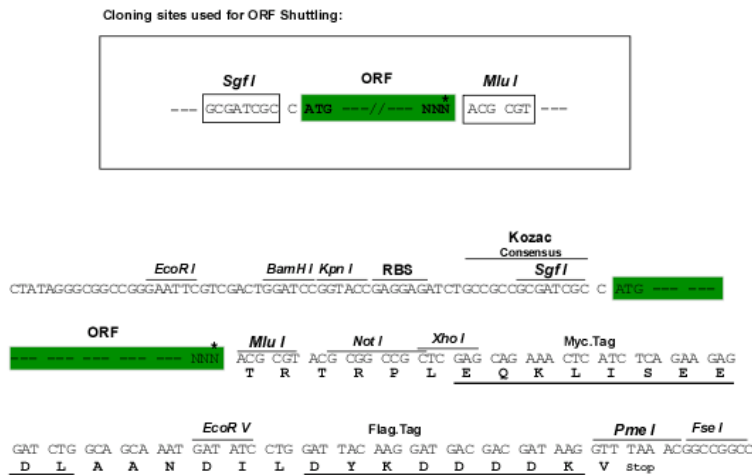
MADPRDKALQDYRKKLLEHKEIDGRLKELREQLKELTKQYEKSENDLKALQSVGQIVGEVLKQLTEEKFI
 VKATNGPRYVVGCRRLDKSKLKPGRVALDMTTLTIMRYLPREVDPLVYNMSHEDPGNVSYSEIGGLSE
 QIRELREVIELPLTNPELFQRVGIIPPKGCLLYGPPGTGKTLARAVASQLDCNFKVVSSSIVDKYIGE
 SARLIREMFNYARDHQPCIIFMDEIDAIGRRFSEGTADREIQRTLMELLNQMDGFDLHRVKMIMATN
 RPDTLDPALLRPGRLDRKIHIDL PNEQARLDILKIHAGPITKHGEIDYEAIVKLSDFNGADLRNVCTEA
 GMFAIRADHDFVVQEDFMKAVRKVADSKKLESKLDYKPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6050_c06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_002806

ORF Size: 1167 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_002806.5](#)

RefSeq Size: 1599 bp

RefSeq ORF: 1170 bp

Locus ID: 5706

UniProt ID: [P62333](#)

Cytogenetics: 14q22.1

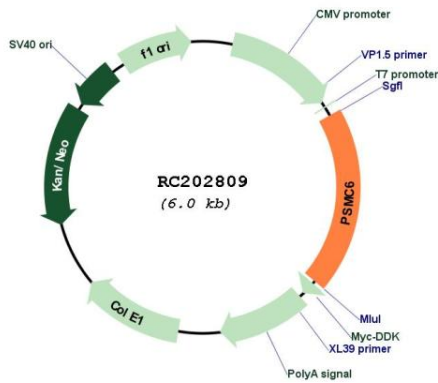
Domains: AAA, AAA

Protein Pathways: Proteasome

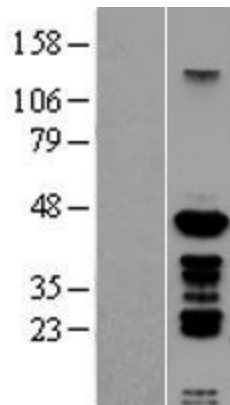
MW: 44.2 kDa

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. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes one of the ATPase subunits, a member of the triple-A family of ATPases which have a chaperone-like activity. Pseudogenes have been identified on chromosomes 8 and 12. [provided by RefSeq, Jul 2008]

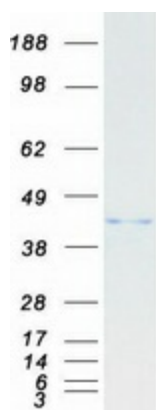
Product images:



Circular map for RC202809



Western blot validation of overexpression lysate (Cat# [LY400994]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202809 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMC6 protein (Cat# [TP302809]). The protein was produced from HEK293T cells transfected with PSMC6 cDNA clone (Cat# RC202809) using MegaTran 2.0 (Cat# [TT210002]).