

Product datasheet for RC229193

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:	>RC229193 representing NM_002806 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCATCCCAGCATCCCCTATGAGAGACGGCTTCTCATCATGGCGGACCCTAGAGATAAGGCGCTTC
AGGACTACCGCAAGAAGTTGCTTGAACACAAGGAGATCGACGGCCGTCTAAGGAGTTAAGGGAACAATT
AAAAGAAGTTACCAAGCAGTATGAAAAGTCTGAAAATGATCTGAAGGCCCTACAGAGTGTGGGCAGATC
GTGGGTGAAGTGCTTAAACAGTTAACTGAAGAAAAATTCATTGTTAAAGCTACCAATGGACCAAGATATG
TTGTGGGTTGTCGTCGACAGCTTGACAAAAGTAAGCTGAAGCCAGGAACAAGAGTTGCTTTGGATATGAC
TACACTAACTATCATGAGATATTTGCCGAGAGAGGTGGATCCACTGGTTTATAACATGTCTCATGAGGAC
CCTGGGAATGTTTCTTATTCTGAGATTGGAGGGCTATCAGAACAGATCCGGGAATTAAGAGAGGTGATAG
AATTACCTCTTACAAACCAGAGTTATTTAGCGGTGTAGGAATAATACCTCCAAAAGGCTGTTTGTATA
TGGACCACCAGGTACGGGAAAAACACTCTTGGCAGGAGCCGTGTAGCCAGCTGGACTGCAATTTCTTA
AAGGTTGTATCTAGTTCTATTGTAGACAAGTACATTTTATGGTGAAGTGTCTGTTTGTATCAGAGAAATGTTTA
ATTATGCTAGAGATCATCAACCATGCATCATTTTTATGGTGAAGTAGATGCTATTGGTGGTCGTCGGTT
TTCTGAGGGTACTTCAGCTGACAGAGAGATTCAGAGAAGTAAATGGAGTTACTGAATCAATGGATGGA
TTTGACTCTGCATAGAGTTAAAATGATCATGGCTACAACAGACCAGATACACTGGACTGCTGCTTTC
TGCGTCCAGGAAGATTAGATAGAAAAATACATATTGATTTGCCAAATGAACAAGCAAGATTAGACATACT
GAAAATCCATGCAGGTCCCATTACAAAGCATGGTAAAATAGATTATGAAGCAATTGTGAAGCTTTTCGGAT
GGCTTTAATGGAGCAGATCTGAGAAATGTTGTACTGAAGCAGGTATGTTTCGCAATTCGTGCTGATCATG
ATTTTGTAGTACAGGAAGACTTCATGAAAGCAGTCAGAAAAGTGGCTGATTCTAAGAAGCTGGAGTCTAA
ATTGGACTACAAACCTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC229193 representing NM_002806
 Red=Cloning site Green=Tags(s)

MAIPGIPYERLLIMADPRDKALQDYRKLLLEHKEIDGRLKELREQLKELTKQYEKSENDLKAQSVGQI
 VGEVLKQLTEEFIVKATNGPRVYVGCRRQLDKSKLKPGRVALDMTTLTIMRYLPREVDPLVYNMESHED
 PGNVSYSEIGGLSEQIRELREVIELPLTNPELFQRVGIIPKGCCLLYGPPGTGKTLARAVASQLDCNLF
 KVVSSSIVDKYIGESARLIREMFNYARDHQPCIIIFMDEIDAIGGRRFSEGT SADREIQRTLMELLNQMDG
 FDTLHRVKMIMATNRPDTPALLRPGRLDRKIHDLPNEQARLDILKIHAGPITKHGEIDYEAIVKLSD
 GFNGADLRNVCTEAGMFAIRADHDFVVQEDFMKAVRKVADSKKLESKLDYKPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8057_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_002806

ORF Size: 1209 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_002806.3](#), [NP_002797.3](#)

RefSeq ORF: 1170 bp

Locus ID: 5706

UniProt ID: [P62333](#)

Cytogenetics: 14q22.1

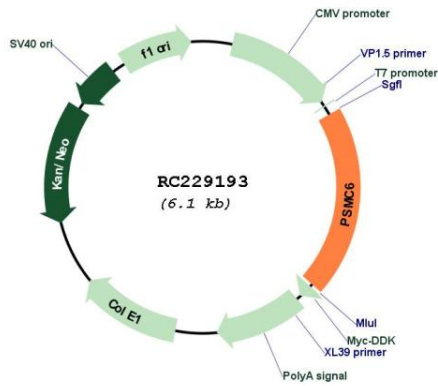
Domains: AAA, AAA

Protein Pathways: Proteasome

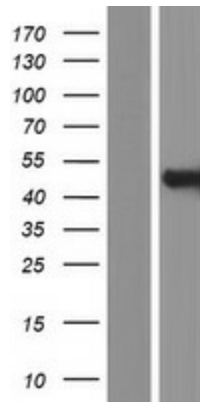
MW: 45.6 kDa

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 RC229193



Western blot validation of overexpression lysate (Cat# [LY432217]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229193 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).