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Product datasheet for RC239475

PSMD2 (NM_001278709) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMD2 (NM_001278709) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSMD2
Synonyms:	P97; RPN1; S2; TRAP2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>RC239475 representing NM_001278709
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTATGTCAGGAGAAGTGGCTAAGGAGTGGCAGGAGCTGGATGACGCAGAGAAGGTCCAGCGGGAGC
CTCTGCTCACTCTGGTGAAGGAAATCGTCCCCTATAACATGGCCCACAATGCAGAGCATGAGGCTTGCGA
CCTGCTTATGGAAATTGAGCAGGTGGACATGCTGGAGAAGGACATTGATGAAAATGCATATGCAAAGGTC
TGCCTTTATCTCACCAGTTGTGTGAATTACGTGCCTGAGCCTGAGAACTCAGCCCTACTGCGTTGTGCCC
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GTTGGTAGAAGACATCTTCACCTCCTGCAAGGATGTGGTAGTACAGAAACAGATGGCATTCATGCTAGGC
CGGCATGGGGTGTTCCTGGAGCTGAGTGAAGATGTCGAGGAGTATGAGGACCTGACAGAGATCATGTCCA
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TGACATCTACAAAACCCACCTAGAGAACAACAGGTTTGGGGGCAGTGGCTCTCAGGTGGACTCTGCCCGC
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ATGATGGCAACAAATGGCTTTACAAGAACAAGGACCACGGAATGTTGAGTGCAGCTGCATCTCTTGGGAT
GATTCTGCTGTGGGATGTGGATGGTGGCCTCACCCAGATTGACAAGTACCTGTACTCCTCTGAGGACTAC
ATTAAGTCAGGAGCTCTTCTTGCCTGTGGCATAGTGAACTCTGGGGTCCGGAATGAGTGTGACCCTGCTC
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CATCTCTGTTTCAAATCCACGACTCAACATCCTGGATACCCTAAGCAAATTCTCTCATGATGCTGATCCA
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CAGGTGGCCGTGGCTGGACTGCTCACTGTGCTTGTCTCTTTCCTGGATGTTCGAAACATTATTCTAGGCA
AATCACACTATGTATTGTATGGGCTGGTGGCTGCCATGCAGCCCCGAATGCTGGTTACGTTTGATGAGGA
GCTGCGGCCATTGCCAGTGTCTGTCCGTGTGGGCCAGGCAGTGGATGTGGTGGGCCAGGCTGGCAAGCCG
AAGACTATCACAGGGTTCCAGACGCATACAACCCCAGTGTTGTTGGCCCACGGGGAACGGGCAGAATTGG
CCACTGAGGAGTTTCTTCCTGTTACCCCCATTCTGGAAGGTTTTGTTATCCTTCGGAAGAACCCCAATTA
TGATCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC239475 representing NM_001278709
Red=Cloning site Green=Tags(s)

MSMSGEVAKEWQELDDAEKVQREPLLTLVKEIVPYNMAHNAEHEACDLLMEIEQVDMLEKDIDENAYAKV
CLYLTSCVNYVPEPENSALLRCALGVFRKFSRFPEALRLALMLNDMELVEDIFTSCKDVVVQKQMAFMLG
RHGVFLELSEDVEEYEDLTEIMSNVQLNSNFLALARELDIMEPKVPDDIYKTHLENNRFGGSGSQVDSAR
MNLASSFVNGFVNAAFGQDKLLTDDGNKWLYKNKDHGMLSAAASLGMILLWDVDGGLTQIDKYLYSSEDY
IKSGALLACGIVNSGVRNECDPALALLSDYVLHNSNTMRLGSIFGLGLAYAGSNREDVLTLLLPVMGDSK
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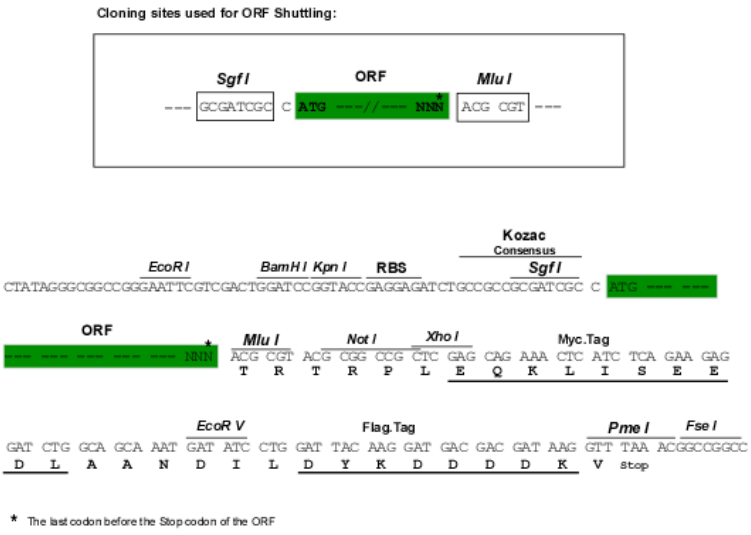
LEVVSEPFRSFANTLVDVCAYAGSGNVLKVQQLLHICSEHFDSKEKEEDKDKKEKKDKDKKEAPADMGAH
QGVAVLGIALIAMGEEIGAEMALRTFGHLLRYGEPTLRRAVPLALALISVSNPRLNILDTLSKFSHDADP
EVSYNSIFAMGMVGSGTNNARLAAMLRQLAQYHAKDPNNLFMVRLAQGLTHLGKGTLTLCPYHSDRQLMS
QVAVAGLLTVLVSFLDVRNIILGKSHYVLYGLVAAMQPRMLVTFDEELRPLPVSVRVGQAVDVVGQAGKP
KTITGFQTHTTPVLLAHGERAELATEEFLPVTPILEGFVILRKNPNYDL

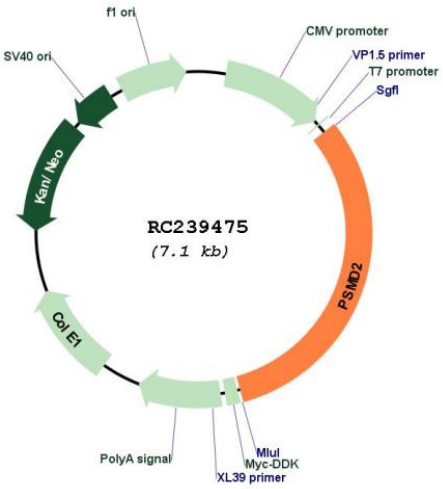
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001278709
ORF Size:	2247 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_001278709.2
RefSeq Size:	2644 bp
RefSeq ORF:	2250 bp
Locus ID:	5708

UniProt ID:	Q13200
Cytogenetics:	3q27.1
Protein Families:	Druggable Genome
Protein Pathways:	Proteasome
MW:	82.6 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 non-ATPase subunits of the 19S regulator lid. In addition to participation in proteasome function, this subunit may also participate in the TNF signalling pathway since it interacts with the tumor necrosis factor type 1 receptor. A pseudogene has been identified on chromosome 1. Alternative splicing results in multiple transcript variants of this gene. [provided by RefSeq, Jul 2013]