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Product datasheet for RC215482

PSMF1 (NM_178578) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMF1 (NM_178578) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSMF1
Synonyms:	PI31
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC215482 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGGCCTGGAGGTACTGTTCGCATCGGCAGCGCCGGCCATCACCTGCAGGCAGGACGCGCTCGTCT
GCTTCTTGCATTGGGAAGTGGTGACACACGGTTACTGCGGCTTGGGTGTCGGTGACCAGCCGGGTCCCAA
TGATAAGAAGTCAGAACTGCTGCCAGCTGGGTGGAACAACAATAAAGACCTGTATGTCCTCCGGTATGAG
TATAAGGATGGGTCCAGAAAGCTCCTTGTGAAAGCCATCACCGTGGAGAGCAGCATGATCCTCAATGTGC
TGGAATATGGCTCACAGCAAGTGGCAGACTTGACCCTGAACTTGGATGATTATATCGATGCAGAACACCT
GGGTGACTTCCACAGGACCTACAAGAACAGTGAGGAGCTTCGGTCTCGTATTGTGTCTGGAATCATCACA
CCTATCCATGAGCAGTGGGAAAAGGCTAATGTAAGCAGTCCCCACCGGGAGTTCCCCCCTGCTACCGCCA
GAGAGGTGGACCCACTCCGGATTCCTCCACACCACCCACACACCAGTCGGCAGCCTCCCTGGTGTGATCC
CCTGGGCCCGTTTGTTGTCGGGGGAGAAGACTTAGACCCTTTTGGGCCTCGGAGAGGTGGCATGATTGTG
GATCCCCTGAGATCTGGCTTCCCAAGAGCACTTATTGACCCTTCCTCAGGCCTCCCGAACCGACTTCCTC
CAGGCGCTGTGCCCCCAGGAGCTCGCTTTGACCCCTTTGGACCCATTGGGACCAGCCCACCCGGACCTAA
CCCAGACCATCTCCCCCCGCCGGGCTACGATGACATGTACCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC215482 protein sequence
Red=Cloning site Green=Tags(s)

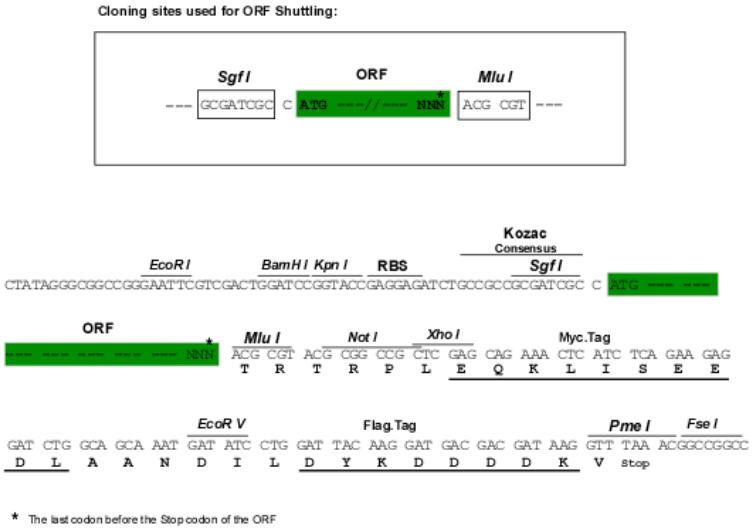
MAGLEVLFASAAPAITCRQDALVCFLHWEVVTHGYCGLGVGDQPGPNDKKSELLPAGWNNNKDLYVLRYE
YKDGSRKLLVKAITVESSMILNVLEYGSQQVADLTLNLDDYIDAEHLGDFHRTYKNSEELRSRIVSGIIT
PIHEQWEKANVSSPHREFPPATAREVDPLRIPPHHPHTSRQPPWCDPLGPFVVGGEDLDPFGPRRGGMIV
DPLRSGFPRALIDPSSGLPNRLPPGAVPPGARFDPFGPIGTSPPGPNPDHLPPPGYDDMYL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6466_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178578

ORF Size: 813 bp

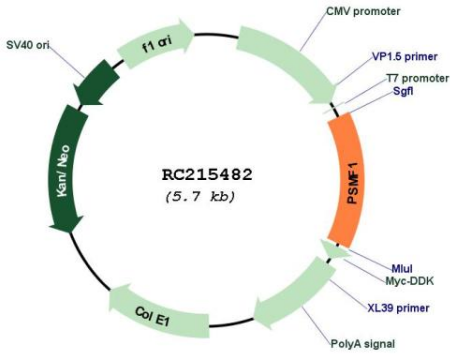
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

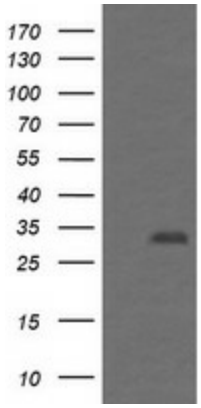
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_178578.1, NP_848693.1
RefSeq Size:	3686 bp
RefSeq ORF:	816 bp
Locus ID:	9491
UniProt ID:	Q92530
Cytogenetics:	20p13
Protein Pathways:	Proteasome
MW:	29.8 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 a protein that inhibits the activation of the proteasome by the 11S and 19S regulators. Alternative transcript variants have been identified for this gene. [provided by RefSeq, Jul 2008]

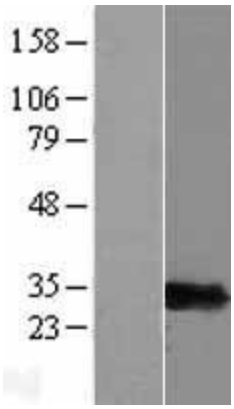
Product images:



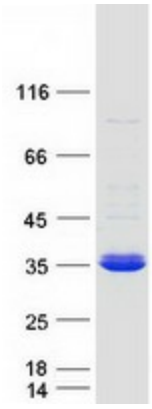
Circular map for RC215482



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PSMF1 (Cat# RC215482, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PSMF1(Cat# [TA505275]). Positive lysates [LY405875] (100ug) and [LC405875] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY405875]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215482 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMF1 protein (Cat# [TP315482]). The protein was produced from HEK293T cells transfected with PSMF1 cDNA clone (Cat# RC215482) using MegaTran 2.0 (Cat# [TT210002]).