OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC111680

PSME1 (NM_006263) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSME1 (NM_006263) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSME1
Synonyms:	HEL-S-129m; IFI5111; PA28A; PA28alpha; REGalpha
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC111680 sequence for NM_006263 edited (data generated by NextGen Sequencing)

ATGGCCATGCTCAGGGTCCAGCCCGAGGCCCAAGCCAAGGTGGATGTGTTTCGTGAAGAC
CTCTGTACCAAGACAGAGAACCTGCTCGGGAGCTATTTCCCCAAGAAGATTTCTGAGCTG
GATGCATTTTTAAAGGAGCCAGCTCTCAATGAAGCCAACTTGAGCAATCTGAAGGCCCCA
TTGGACATCCCAGTGCCTGATCCAGTCAAGGAGAAAGAGAAAGAGGAGCGGAAGAAACAG
CAGGAGAAGGAAGACAAGGATGAAAAGAAGAAGGGGGAGGATGAAGACAAAGGTCCTCCC
TGTGGCCCAGTGAACTGCAATGAAAAGATCGTGGTCCTTCTGCAGCGCTTGAAGCCTGAG
ATCAAGGATGTCATTGAGCAGCTCAACCTGGTCACCACCTGGTTGCAGCTGCAGATACCT
CGGATTGAGGATGGTAACAATTTTGGAGTGGCTGTCCAGGAGAAGGTGTTTGAGCTGATG
ACCAGCCTCCACACCAAGCTAGAAGGCTTCCACACTCAAATCTCTAAGTATTTCTCTGAG
CGTGGTGATGCAGTGACTAAAGCAGCCAAGCAGCCCCATGTGGGTGATTATCGGCAGCTG
GTGCACGAGCTGGATGAGGCAGAGTACCGGGACATCCGGCTGATGGTCATGGAGATCCGC
AATGCTTATGCTGTGTTATATGACATCATCCTGAAGAACTTCGAGAAGCTCAAGAAGCCC
AGGGGAGAAACAAAGGGAATGATCTATTGA

Clone variation with respect to NM_006263.2

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006263 unedited
ACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGAGCTGGGTGCGAGCGCCCTACC
GCTTTCGCTTTCCCTTCGCGGTGCCCACTCCACTCCTTGTGCGGCGCTAGGCCCCCCGTC
CCGGTCATGGCCATGCTCAGGGTCCAGCCCGAGGCCCAAGCCAAGGTGGATGTGTTTCGT
GAAGACCTCTGTACCAAGACAGAGAACCTGCTCGGGAGCTATTTCCCCAAGAAGATTTCT
GAGCTGGATGCATTTTTAAAGGAGCCAGCTCTCAATGAAGCCAACTTGAGCAATCTGAAG
GCCCCATTGGACATCCCAGTGCCTGATCCAGTCAAGGAGAAAGAGAAAGAGGAGCGGAAG
AAACAGCAGGAGAAGGAAGACAAGGATGAAAAGAAGAAGGGGGAGGATGAAGACAAAGGT
CCTCCCTGTGGCCCAGTGAACTGCAATGAAAAGATCGTGGTCCTTCTGCAGCGCTTGAAG
CCTGAGATCAAGGATGTCATTGAGCAGCTCAACCTGGTCACCACCTGGTTGCAGCTGCAG
ATACCTCGGATTGAGGATGGTAACAATTTTGGAGTGGCTGTCCAGGAGAAGGTGTTTGAG
CTGATGACCAGCCTCCACACCAAGCTAGAAGGCTTCCACACTCAAATCTCTAAGTATTTC
TCTGAGCGTGGTGATGCAGTGACTAAAGCAGCCAAGCAGCCCCATGTGGGTGATTATCGG
CAGCTGGTGCACGAGCTGGATGAGGCANAGTACCGGGACATCCGGCTGATGGTATGGNAG
ATCCGCAATGCTTNATGCTGTNGTATATGACATCATNCTGAAAGACTTCGAGAGCTCAAG
AAGCCAGGGGAGAACAAGGGGATGATTATTNGAGACCCTCTCTCCCANCTGTGATGAGTC
ANCANAGACTTNCTGCNTTTACATGGGACTNCAGATTTNCCNNAACTGCTCTGTTGAGAA
TTTNCCTNACCTTGCCCTTAG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006263 unedited
GCCGCGCCCCCGGCCCNCCNNNCCCCCCCCCCCNCCCCCCCCCCTTTTTCCCCCTCTATT
CTTATGTGTCCTGTANGAGCAGGTTGAGGGCAAAAACTCACAGAGCAGTTTGGGGAAAAC
TGGAGTCCCCAGTAAAAACCACGCAAGTCTCTGCTGTACTCATCACAGAATGGGAGAGAG
GGCTCTCAATAGATCATTCCCTCTGTTTCTCCCCTGGGCTTCTTGAGCTTCTCGAAGTTC
TTCACGATGATGTCATATAACACAGCATAAGCATTGCGGATCTCCATGACCATTATCCGG
ATGTCCCGGTACTCTGCCTCATCCACCTCGTGCACCATCTGCCGATAATCACCCACATGG
GGCTGCTTGGCTGCTTTACCCACTGCATCACCACGCTCACAGAAATACTTATAGATTTGA
GTGCGGAAGCCTTCTACCTCGGTGTGGAGGCTGGCCATTAGTTTAAACACCTCCTCCTGC
ACAGTCACTCCAAAATTGTTACCATCTCTCAATCCCAGGTATCTGCATCTGCAACCAGTT
GGTGACCAGGTTGACCCGTTCAATGACATCCCAGATCTCAAGTTTCAAGCTCTGACGAAC
GACCACCATCCTTTTATTGTTCCTCACCTGTGCCACATGGAGGACCTTAGCCTTCATCCC
TCCCCTTCTTCTTTCTAACCCCGCCTTCCTTCTCCTGCAGTCCCTTCCGCTCCTCCTCCT
CTTTCCCCTTGACTGGATCAGGCACTGGGATTTCCAATGGGGCCCTTCCATTGCTAATAT
CGCTCCATGCACACCCTCCTCCCTCACAAAGCTTCCACCCCACAAATTCTCTTGGCGACA
CACCTCCCTCACCAGTTCTTCTTCCTCGAAACATAGCTATCCCCACCCACATCACATCCC
ATCGGTACTCGTGCTGGATCCTTTATC

Restriction Sites: NotI-NotI

ACCN: NM_006263

Insert Size: 1190 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_006263.2, NP_006254.1
RefSeq Size:	1012 bp
RefSeq ORF:	750 bp
Locus ID:	5720
UniProt ID:	Q06323
Cytogenetics:	14q12
Domains:	PA28_alpha, PA28_beta
Protein Pathways:	Antigen processing and presentation, Proteasome
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. The immunoproteasome contains an alternate regulator, referred to as the 11S regulator or PA28, that replaces the 19S regulator. Three subunits (alpha, beta and gamma) of the 11S regulator have been identified. This gene encodes the alpha subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three alpha and three beta subunits combine to form a heterohexameric ring. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013] Transcript Variant: This variant (1) encodes isoform 1.