

## Product datasheet for **SC334664**

### PSME1 (NM\_001281528) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PSME1 (NM_001281528) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSME1
Synonyms:	HEL-S-129m; IFI5111; PA28A; PA28alpha; REGalpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001281528, the custom clone sequence may differ by one or more nucleotides

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ATGGCCATGCTCAGGGTCCAGCCCGAGGCCAAGCCAAGGTGGATGTGTTTCGTGAAGACCTCTGTACCA
AGACAGAGAACCTGCTCGGGAGCTATTTCCCAAGAAGATTTCTGAGCTGGATGCATTTTTAAAGGAGCC
AGCTCTCAATGAAGCCAACCTTGAGCAATCTGAAGGCCCATTTGGACATCCAGTGCCTGATCCAGTCAAG
GAGAAAGAGAAAGAGGAGCGGAAGAAACAGCAGGAGAAGGAAGACAAGGATGAAAAGAAGAAGGGGGAGG
ATGAAGACAAAGGTCTCCCTGTGGCCAGTGAAGTCAATGAAAAGATCGTGGTCTTCTGCAGCGCTT
GAAGCCTGAGATCAAGGATGTCATTGAGCAGCTCAACCTGGTACCACCTGGTTGCAGCTGCAGATACCT
CGGATTGAGGATGGTAACAATTTTGGAGTGGCTGTCCAGGAGAAGGTGTTTGGAGCTGATGACCAGCCTCC
ACACCAAGCTAGAAGGCTTCCCACTCAAATCTCTAAGTATTTCTGAGCGTGGTATGCAGTGACTAA
AGCAGCCAAGCAGCCCCATGTGGGTGATTATCGGCAGCTGGTGCACGAGCTGGATGAGGCAGAGTACCGG
GACATCCGGCTGATGGTCATGGAGATCCGCAATGCTTATGTGAGGAGGCTGTGTTATATGACATCATCTCT
GA
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Restriction Sites:	Sgfl-MluI
ACCN:	NM_001281528
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).



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<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001281528.1</a></u> , <u><a href="#">NP_001268457.1</a></u>
<b>RefSeq Size:</b>	1031 bp
<b>RefSeq ORF:</b>	702 bp
<b>Locus ID:</b>	5720
<b>UniProt ID:</b>	<u><a href="#">Q06323</a></u>
<b>Cytogenetics:</b>	14q12
<b>Protein Pathways:</b>	Antigen processing and presentation, Proteasome
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (3) uses an alternate splice site in the 3' coding region, which results in a frameshift, compared to variant 1. It encodes isoform 3, which has a shorter and distinct C-terminus, compared to isoform 1.</p>