

Product datasheet for **SC118389**

PSME2 (NM_002818) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSME2 (NM_002818) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSME2
Synonyms:	PA28B; PA28beta; REGbeta
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118389 sequence for NM_002818 edited (data generated by NextGen Sequencing)

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ATGGCCAAGCCGTGTGGGGTGCCTGAGCGGGGAAGCCCGCAAACAGGTGGAGTCTTC
AGACAGAATCTTTCCAGGAGGCTGAGGAATTCCTCTACAGATTCTGCCACAGAAAATC
ATATACCTGAATCAGCTCTTGAAGAGGACTCCCTCAATGTGGCTGACTTGACTTCCCTC
CGGGCCCCACTGGACATCCCATCCCAGACCCTCCACCAAGGATGATGAGATGGAACA
GATAAGCAGGAGAAGAAAGAAGTCCCTAAGTGTGGATTCTCCCTGGGAATGAGAAAGTC
CTGTCCCTGCTTGCCTGGTTAAGCCAGAAGTCTGGACTCTCAAAGAGAAATGCATTCTG
GTGATTACATGGATCCAACACTGATCCCCAAGATTGAAGATGGAATGATTTTGGGGTA
GCAATCCAGGAGAAGGTGCTGGAGAGGGTGAATGCCGTCAAGACCAAAGTGAAGCTTTC
CAGACAACCATTTCCAAGTACTTCTCAGAACGTGGGGATGCTGTGGCCAAGGCCTCCAAG
GAGACTCATGTAATGGATTACCGGCCTTGGTGCATGAGCGAGATGAGGCAGCCTATGGG
GAGCTCAGGGCCATGGTCTGGACCTGAGGGCCTTCTATGCTGAGCTTTATCATATCATC
AGCAGCAACCTGGAGAAAATTGTCAACCAAGGGTGAAGAAAAGCCATCTATGTACTGA

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Clone variation with respect to NM_002818.2
266 a=>c



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002818 unedited
 CTTTTGTATACGACTACTATAGGGCGGCCGGAATTCGCACGAGGGCAGCATGGCCAAG
 CCGTGTGGGGTGCCTGAGCGGGGAAGCCCGCAAACAGGTGGAGGTCTTCAGACAGAAT
 CTTTCCAGGAGGCTGAGGAATTCCTCTACAGATTCTTGCCACAGAAAATCATATACCTG
 AATCAGCTCTTGAAGAGGACTCCCTCAATGTGGCTGACTTGACTTCCCTCCGGGCCCA
 CTGGACATCCCCATCCCAGACCTCCACCAAGGATGATGAGATGAAAACAGATAAGCAG
 GAGAAGAAAGAAGTCCCTAAGTGTGGATTCTCCCTGGGAATGAGAAAAGTCTGTCCCTG
 CTTGCCCTGGTTAAGCCAGAAGTCTGGACTCTCAAAGAGAAATGCATTCTGGTGATTACA
 TGGATCCAACACCTGATCCCAAGATTGAAGATGAAAATGATTTTGGGGTAGCAATCCAG
 GAGAAGGTGCTGGAGAGGGTGAATGCCGTCAAGACCAAAGTGAAGCTTTCCAGACAACC
 ATTTCCAAGTACTTCTCAGAACGTGGGGATGCTGTGGCCAAGGCCTCCAAGGAGACTCAT
 GTAATGGATTACCGGCCCTTGGTGCATGAGCGAGATGAGGCAGCCTATGGGGAGCTCAGG
 GCCATGTGCTGGACCTGAGGGCCCTCTATGCTGAGCTTTATATATCATCACCAGCAACCT
 GGAAGAAATTGTCACCCAAGGGTGAAGAAAACCTCTATGTAAGTGAACCCGGGACTAGA
 AAGGAAACAAATGATCCATTTGTTGTGGGGAAAAAAAAAAAAACAACCTCACTTTATATG
 CGCCCGGGGCATAACTGTTCCCTGACAAAACCCGGGGGCATCCCTGGACCTCCCGGGG
 CTTTCTGGGCCCGGAAGTGGCACTCCAGCCCCCCCCCTGTCTAAAAATGACG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002818 unedited
 GTAACGCGGTCCGCAATCTATATCGAGTTTTTTTTTTTTTTTTTTTCCACAACATATAGA
 TCATTTATTTTCTTCTAGTCCCGGTTTCCAGTACATAAATGGCTTTTCTCACCTTTGG
 GTTGACAATTTTCTCCAGTTGCTGCTGATGATGATAAAGCTCATACAAGGCCCT
 CAGGTCCACCACCATGGTCTGAGCTCCCATAGGCTGCCTCATCTCGCTCATGCACCAA
 GGTCCGGCAATCCATTACATGATCCCTCTTGGAGGACTTGCCACATCTCCCCACCCT
 TTGATAAACACTTGGAATGGCTGCGTGTAAAGTTCACCTTTGCTCTTGACGGACTTTTC
 TCTTATCATTCCCTTCTCTGCCTTGCCTCCACCCCTCTCCCCCTCTCCTTTTTCAGC
 CCTCCGCGCCCTACCCGACCCCTCTCCATTGCCCTCTCCCTCACCCCTCACCTCCC
 CACCCCTCTCTCCCTCTCTTTCCATCTCACCCCACTATACTCCCTATCCCGCA
 CCCACCCCTCTCTCCACCTCTCGTTGCACTCATCCACTCTACCTTATTTTCTACT
 CTCCCATTGTTGTGTCTACGTTCTCCTCCTCTTCTTCTTCTACACCCCTACTC
 CCTGTTTCTATCTCTTGTCTAAATCCCCCCCCCTCCCTCCCTCCATTCTACTACTCT
 TCCTCACCCCACTTCTCCCTATCCCTATCCCTTATTTCATGTACATATATAATCC
 TCAGTTCTCTCGTTTTTTCACACTTTTGTTCCTTATCCCAACTCCCCCATCTCTTTA
 CCTGTCTTCTCATTAGACTTATTTATCACCTTCTGTCCCTTACCGTCACACTCTTTC
 CACATTTCCCTCTCCCCCACACCCCTTTCATCGCCCCACCTCCCTTTTCTCCTTTCT
 CCTCTCTTTG

Restriction Sites:

NotI-NotI

ACCN:

NM_002818

Insert Size:

850 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:	<ol style="list-style-type: none">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_002818.2 , NP_002809.2
RefSeq Size:	829 bp
RefSeq ORF:	720 bp
Locus ID:	5721
UniProt ID:	Q9UL46
Cytogenetics:	14q12
Domains:	PA28_alpha, PA28_beta
Protein Pathways:	Antigen processing and presentation, Proteasome
Gene Summary:	<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 beta subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three beta and three alpha subunits combine to form a heterohexameric ring. Six pseudogenes have been identified on chromosomes 4, 5, 8, 10 and 13. [provided by RefSeq, Jul 2008]</p>