

Product datasheet for **SC321554**

PSME3 (NM_005789) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSME3 (NM_005789) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSME3
Synonyms:	HEL-S-283; Ki; PA28-gamma; PA28G; PA28gamma; REG-GAMMA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_005789.2
 GGCGAAAGCCGGGAGGGCGAGCGAGAGCAAGCAGGCAGCAGGCTGCCGGCGGGCGGGC
 GGACGGCAGAGGGGAGGGAGCGAGCGAGCAGTGAAGCCAGCAAGGGCGGTCCGGTC
 CCGAGGTCAGCCGAGATTTCTCAGGTCCCTCCGGCCCCCTCCCTGGAGTCCACAGCGCCT
 CCGGTGTCCAGAGGATCGGACACGGCCCCGGCCATGGCCTCGTTGCTGAAGTGGA
 TCAGGAAGTGAAGCTCAAGTTGATTCTTTCAGGGAGCGGATCACAAGTGAGGCAGAAGA
 CTTGGTGGCAAATTTTTCCCAAAGAAGTTATTAGAAGTGGATAGTATTTCTGAAGGAACC
 AATCTTAAACATCCATGACCTAACTCAGATCCACTCTGACATGAATCTCCAGTCCCTGA
 CCCCATTCTTCTACCAATAGCCATGATGGACTGGATGGTCCACTTATAAGAAGCGAAG
 GTTGGATGAGTGTGAAGAAGCCTTCCAAGGAACCAAGGTGTTTGTGATGCCCAATGGGAT
 GCTGAAAAGCAACCAGCAGCTGGTGGACATTATTGAGAAAGTAAACCTGAGATCCGGCT
 GTTGATTGAGAAATGTAACACGGTCAAAATGTGGGTACAGCTCCTGATCCAGGATAGA
 AGATGGAAACAACCTTTGGGGTGTCCATTCCAGGAGAAACAGTTGCAGAGCTAAGAACTGT
 TGAGAGTGAAGCTGCATCTTATCTGGACCAGATTTCTAGATATTATTACAAGAGCCAA
 ATGGTTTCTAAAATAGCTAAAATATCCCATGTGGAGGACTATCGCCGCACCGTGACAGA
 GATTGATGAGAAAGAATATATCAGCCTTCGGCTCATCATCAGAGCTGAGGAATCAATA
 TGTCACTCTACATGACATGATCCTGAAAAATATCGAGAAGATCAAACGGCCCCGGAGCAG
 CAATGCAGAGACTCTGTACTGAGGCCAGGGCCAGGGCCAGGGGACTCTGTGAGTCTGGCT
 CAAGACCGACATTGCCTTGGTTTGTACATGACTATCGTGATGGGGAACTGGCTGGAAA
 TAGTAATCACACCTCTCTGTTTTAGTTAGAGTCTAATGAAACTCTCATCTAGTTCTGTG
 ATGTGTTTACCTTTTTTCAGGCCTCAGGAACTTCTATTTCCCTCCCTAATACCCCA
 CACCAACCTGTGTAATTTCTGGAGAACTCCAGTGTGTGTGCAGGATGTTGGCACA
 AAAATACCTGTGTTTTTCACTTCCCTCTCCTCCTGTGTCTTGGCCTTTATGTTTT
 CTTCCGTTTGATAATTAGTTGGTTAAAAGCTGAGGGAACCGGAAGGAAAGTGCTAGGTGT
 TTTTTAGGAACTAGGGTGGCGGGGGACGAACTTCTTCTCCTACATGAGGTTACTGTTT
 CTTTCTCTGTGGGGCATTGGATCCTCCACAGTTGCCCTGGTGTGACTTAGGGCTTCC
 CATCTGTGTACATCCACTTTGAATCTTGATCGTGACAAGAAATACCTTAGGCCTCAGT
 CAATCCGAAGCTCCTCAGTTGTTTTATAATGGGCGTTTTACATGCACATATGTGTA
 TGCATGTATACGCCATACAGACATGCACACACAGACTCCTACTCCATTAGCTAACATAC
 CCTCCCTCTCCACAACCCTGTACATACCTTTCAGGAGGTGACAGTTGTCTTAGTTGTC
 ATCTACCCAGACAACGTCTGGGCCCTCCTCCCTCCTGATACTGTAGCCTCTTGGTAC
 CCAGGGTGAGTTGGTGGAGAACAGAGAGATGAGAAGCAGAGGGCTTGGGAAAGCCTGTT
 CCTCTCTGACTCAGCCCTTTTTGGCATTATTGCAAGAGCTTGACTCCTGGTTGCCTTTTC
 CCAGCCAGTTTTCAGTTGGGGTGAAGGTTTCTGCAAGTGTGAGGTCCAGATGCTGCTGCT
 CATGTTGGGCTTTCCTTTTGGGAACTATTTCTCTTTATTTATAGTGTCCGGCTTCCGGGG
 AAAGCAATCATTGGTGTGTATGTGTATGTGCATGCACACACGTGCATATACACATTTGTG
 TATGTGGAAATGTGCTGGGCAAGTCAAACTATAGAAGAGTTGCCTCCTGTCTCTCGAAT
 CTTCCAGAGATACACTTAATTGTTAACAGCTTTTGTGTTAATCCCTTCCAGCCCCTAGC
 TCTTTTATTCTACCACGGCTGGAGAGTTGATACCTGCAGTCAGCCTGCCAGTACTCTTA
 GTGTCTGTTTCTGACTTATTTTTCTGTCTGTCTTCCAACCCCAATAATATTTCCAC
 CGGGGATGCATCATTTTACTCCCAATATTCTGTAGAGAGGGAGTCAGGATGCTGTCTTC
 CCACGAATAGTACTCAGTAACAAACCAATTGCATTTTAGTTGGGCAAGTCTCCACCCAC
 CCTCCAGATCCCTTCCAGCTAAAACCTTCCCCCTCCCTCCATGTGTTTCTCAGTTTCC
 CGTTTCGTTTGTGGACTGTTCCACTGCCCTCCTCCTCACCTATACCCATGGATCGT
 AATGTAATAATCTTTTACCATGTCAAGAAATTATAAAAATACAGGACTTTGACCTCTT
 TCTAAAGCCGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_005789

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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>NM_005789.2</u> , <u>NP_005780.2</u>
RefSeq Size:	3189 bp
RefSeq ORF:	765 bp
Locus ID:	10197
UniProt ID:	<u>P61289</u>
Cytogenetics:	17q21.31
Domains:	PA28_alpha, PA28_beta
Protein Families:	Stem cell - Pluripotency
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 gamma subunit of the 11S regulator. Six gamma subunits combine to form a homohexameric ring. Alternate splicing results in multiple transcript variants. [provided by RefSeq, May 2012]

Transcript Variant: This variant (1) encodes the predominant isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.