

Product datasheet for **SC318681**

Proteasome Activator Subunit 4 (PSME4) (NM_014614) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Proteasome Activator Subunit 4 (PSME4) (NM_014614) Human Untagged Clone
Tag:	Tag Free
Symbol:	PSME4
Synonyms:	PA200
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC318681 representing NM_014614. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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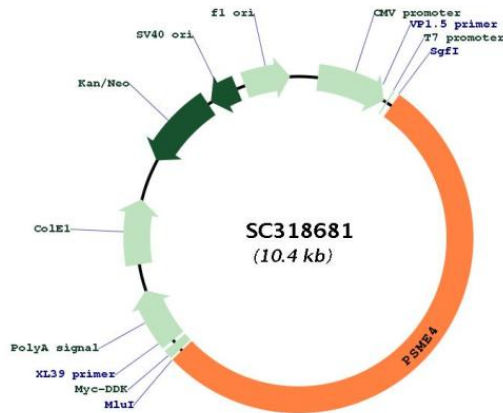
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Restriction Sites:

Sgfl-Mlul

Plasmid Map:



ACCN:

NM_014614

Insert Size:

5532 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).

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:

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_014614.2](#)

RefSeq Size: 7101 bp

RefSeq ORF: 5532 bp

Locus ID: 23198

UniProt ID: [Q14997](#)

Cytogenetics: 2p16.2

Protein Pathways: Proteasome

MW: 211.3 kDa

Gene Summary: Associated component of the proteasome that specifically recognizes acetylated histones and promotes ATP- and ubiquitin-independent degradation of core histones during spermatogenesis and DNA damage response. Recognizes and binds acetylated histones via its bromodomain-like (BRDL) region and activates the proteasome by opening the gated channel for substrate entry. Binds to the core proteasome via its C-terminus, which occupies the same binding sites as the proteasomal ATPases, opening the closed structure of the proteasome via an active gating mechanism. Component of the spermatoproteasome, a form of the proteasome specifically found in testis: binds to acetylated histones and promotes degradation of histones, thereby participating actively to the exchange of histones during spermatogenesis. Also involved in DNA damage response in somatic cells, by promoting degradation of histones following DNA double-strand breaks.[UniProtKB/Swiss-Prot Function]