

Product datasheet for SC329755

PSMC2 (NM_001204453) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: PSMC2 (NM_001204453) Human Untagged Clone

Tag: Tag Free
Symbol: PSMC2

Synonyms: MSS1; Nbla10058; RPT1; S7

Vector: pCMV6-Entry (PS100001)

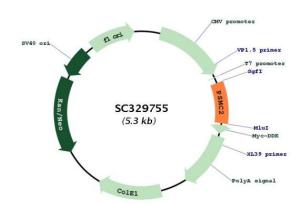
Fully Sequenced ORF: >SC329755 representing NM_001204453.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

AGAGTGGGGTAA

Restriction Sites: Sgfl-Mlul

Plasmid Map:





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PSMC2 (NM_001204453) Human Untagged Clone - SC329755

ACCN: NM_001204453

Insert Size: 426 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: <u>NM 001204453.1</u>

 RefSeq Size:
 989 bp

 RefSeq ORF:
 426 bp

 Locus ID:
 5701

 UniProt ID:
 P35998

 Cytogenetics:
 7q22.1

Protein Pathways: Proteasome

MW: 15.8 kDa



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. This gene encodes one of the ATPase subunits, a member of the triple-A family of ATPases which have a chaperone-like activity. This subunit has been shown to interact with several of the basal transcription factors so, in addition to participation in proteasome functions, this subunit may participate in the regulation of transcription. This subunit may also compete with PSMC3 for binding to the HIV tat protein to regulate the interaction between the viral protein and the transcription complex. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Mar 2011]

Transcript Variant: This variant (2) includes an alternate segment at its 3' terminal exon which contains a premature stop codon, compared to variant 1. This variant encodes an isoform (2) with a shorter C-terminus, compared to isoform 1.