

Product datasheet for **SC329559**

Proteasome 20S alpha 5 (PSMA5) (NM_001199772) Human Untagged Clone

Product data:

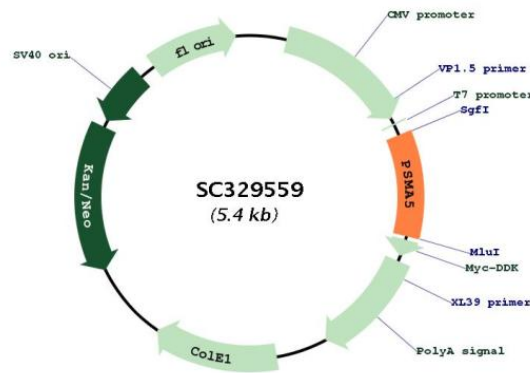
Product Type: Expression Plasmids
Product Name: Proteasome 20S alpha 5 (PSMA5) (NM_001199772) Human Untagged Clone
Tag: Tag Free
Symbol: PSMA5
Synonyms: PSC5; ZETA
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC329559 representing NM_001199772.
Blue=Insert sequence **Red**=Cloning site **Green**=Tag(s)

```
ATGGAGCCAGCAGCATTGAGAAAATTGTAGAGATTGATGCTCACATAGGTTGTGCCATGAGTGGGCTA
ATTGCTGATGCTAAGACTTTAATTGATAAAGCCAGAGTGGAGACACAGAACCACTGGTTCACCTACAAT
GAGACAATGACAGTGGAGAGTGTGACCCAAGCTGTGTCCAATCTGGCTTTCAGTTGGAGAAGAAGAT
GCAGATCCAGGTGCCATGTCTCGTCCCTTTGGAGTAGCATTATTATTTGGAGGAGTTGATGAGAAAGGA
CCCCAGCTGTTTCATATGGACCCATCTGGGACCTTTGTACAGTGTGATGCTCGAGCAATTGGCTCTGCT
TCAGAGGGTGCCAGAGCTCCTTGAAGAAGTTTACCACAAGTCTATGACTTTGAAAGAAGCCATCAAG
TCTTCACTCATCATCCTCAAACAAGTAATGGAGGAGAAGCTGAATGCAACAACATTGAGCTAGCCACA
GTGCAGCCTGGCCAGAATTTCCACATGTTCCAAAGGAAGAAGCTTGAAGAGGTTATCAAGGACATTTAA
```

Restriction Sites: Sgfl-Mlul



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Plasmid Map:


ACCN: NM_001199772

Insert Size: 552 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: [NM_001199772.1](#)

RefSeq Size: 3771 bp

RefSeq ORF: 552 bp

Locus ID: 5686

UniProt ID: [P28066](#)

Cytogenetics: 1p13.3

Protein Families: Druggable Genome, Protease

Protein Pathways: Proteasome

MW: 20 kDa

Gene Summary: The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure 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. 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 a member of the peptidase T1A family, that is a 20S core alpha subunit. Multiple alternatively spliced transcript variants encoding two distinct isoforms have been found for this gene. [provided by RefSeq, Dec 2010]

Transcript Variant: This variant (2) lacks an exon in the 5' region, resulting in a downstream AUG start codon, as compared to variant 1. The resulting isoform (2) is shorter at the N-terminus, as compared to 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.