

Product datasheet for SC313462

OriGene Technologies, Inc.

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26S proteasome non ATPase regulatory subunit 12 (PSMD12) (NM_174871) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: 26S proteasome non ATPase regulatory subunit 12 (PSMD12) (NM_174871) Human Untagged

Clone

Tag: Tag Free
Symbol: PSMD12

Synonyms: p55; Rpn5; STISS

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)





Fully Sequenced ORF:

>SC313462 representing NM_174871.

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

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGGATCGCC

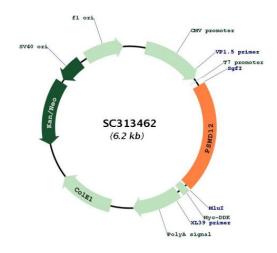
ATGGCGGACGGCGGCTCGGAGCGGGCTGACGGGCGCATCGTCAAGATGGAGGTGGACTACAGCGCCACG GTGGATCAGCGCCTACCCGAGTGTGCGAAGCTAGCCAAGGCTTCCGATATGGTATCGACATCCCGTATC TTAGTTGCAGTAGTGAAGATGTGCTATGAGGCTAAAGAATGGGATTTACTTAATGAAAATATTATGCTT TTGTCCAAAAGGCGGAGTCAGTTAAAACAAGCTGTTGCCAAAATGGTTCAACAGTGCTGTACTTATGTT GAGGAAATCACAGACCTTCCTATCAAACTTCGATTAATTGATACTCTACGAATGGTTACCGAAGGCAAG ATTTATGTTGAAATTGAGCGTGCGCGACTGACTAAAACATTAGCAACTATAAAAGAACAAAAATGGTGAT CGAGTGGAATTTATTTTGGAGCAAATGAGGCTCTGCCTAGCTGTGAAGGATTACATTCGAACACAAATC ATCAGCAAGAAAATTAACACCAAATTTTTCCAGGAAGAAAATACAGAGAAATTAAAGTTGAAGTACTAT AATTTAATGATTCAGCTGGATCAACATGAGGGATCCTATTTGTCTATTTGTAAGCACTACAGAGCAATA TATGATACTCCCTGTATACAGGCAGAAAGTGAAAAATGGCAGCAGGCTCTGAAGAGTGTTGTACTCTAT GTTATCCTGGCTCCTTTTGACAATGAACAGTCAGATTTGGTTCACCGAATAAGTGGTGACAAGAAGTTA GAAGAAATTCCCAAATACAAGGATCTTTTAAAGCTTTTTACCACAATGGAGTTGATGCGTTGGTCCACA CTTGTTGAGGACTATGGAATGGAATTAAGAAAAGGTTCCCTTGAGAGTCCTGCAACGGATGTTTTTGGT TCTACAGAGGAAGGTGAAAAAAGGTGGAAAGACTTGAAGAACAGAGTTGTTGAACATAATATTAGAATA TCCGAAGCCTTTCTCTCAAATCTAGTAGTTAACAAGACCATCTTTGCTAAAGTAGACAGATTAGCAGGA ATTATCAACTTCCAGAGACCCAAGGATCCAAATAATTTATTAAATGACTGGTCTCAGAAACTGAACTCA

ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:

Sgfl-Mlul

Plasmid Map:



ACCN: NM_174871

Insert Size: 1311 bp



26S proteasome non ATPase regulatory subunit 12 (PSMD12) (NM_174871) Human Untagged Clone – SC313462

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: <u>NM 174871.3</u>

RefSeq Size: 4363 bp

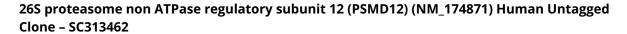
RefSeq ORF: 1311 bp **Locus ID:** 5718

UniProt ID: 000232

Cytogenetics: 17q24.2

Protein Pathways: Proteasome

MW: 50.6 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 a non-ATPase subunit of the 19S regulator. A pseudogene has been identified on chromosome 3. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015] Transcript Variant: This variant (2) lacks an alternate in-frame coding exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter 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.