

PSME1 cDNA

Catalog Number: ATGD0128

PRODUCT INFORMATION

Catalog number

ATGD0128

Product type

cDNA

Species

Human

NCBI Accession No.

NP_006254.1

Alternative Names

Proteasome activator subunit 1, 11S regulator complex subunit alpha, REG-alpha, Activator of multicatalytic protease subunit 1, Interferon gamma up-regulated I-5111 protein, IGUP I-5111, Proteasome activator 28 subunit alpha, PA28a, PA28alpha, IFI5111

mRNA Refseq

NM_006263.3

OMIM

600654

Chromosome location

14q11.2

PRODUCT SPECIFICATION

Formulation

Lyophilized

Storage

Store the plasmid at -20C.

cDNA Size

750bp

Preparation before usage

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA. Each tube contains approximately 10ug of lyophilized plasmid.

Vector description

This shuttle vector contains the complete ORF. It is inseted BamH I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

Cloning Vector

pATGen (puc19-derived cloning vector)

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General Description

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 alpha subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three alpha and three beta subunits combine to form a heterohexameric ring. Alternative splicing results in multiple transcript variants.

DATA

Sequence nucleotides

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ATGGCCATGCTCAGGGTCCAGCCCGAGGCCCAAGCCAAGGTGGATGTGTTTCGTGAAGACCTCTGTACCAAGACAGAGAA
CCTGCTCGGGAGCTATTTCCCAAGAAGATTTCTGAGCTGGATGCATTTTTAAAGGAGCCAGCTCTCAATGAAGCCAACTTG
AGCAATCTGAAGGCCCCATTGGACATCCCAGTGCCTGATCCAGTCAAGGAGAAAGAGAAAGAGGAGCGGAAGAAACAGCA
GGAGAAGGAAGACAAGGATGAAAAGAAGAAGGGGGAGGATGAAGACAAAGGTCCTCCCTGTGGCCCAGTGAAGTCAAT
GAAAAGATCGTGGTCCTTCTGCAGCGCTTGAAGCCTGAGATCAAGGATGTCATTGAGCAGCTCAACCTGGTCACCACTGG
TTGCAGCTGCAGATACCTCGGATTGAGGATGGTAACAATTTGGAGTGGCTGTCCAGGAGAAGGTGTTTGGAGCTGATGACC
AGCCTCCACACCAAGCTAGAAGGCTTCCACACTCAAATCTCTAAGTATTTCTCTGAGCGTGGTGTGATGCAGTGAAGCAG
CCAAGCAGCCCCATGTGGGTGATTATCGGCAGCTGGTGCACGAGCTGGATGAGGCAGAGTACCGGGACATCCGGCTGATG
GTCATGGAGATCCGCAATGCTTATGCTGTGTTATATGACATCATCCTGAAGAACTTCGAGAAGCTCAAGAAGCCCAGGGGA
GAAACAAAGGGAATGATCTATTGA
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Transaction Sequence

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QEKEDKDEKK KGEDEDKGPP CGPVNCNEKI VVLLQRLKPE IKDVIEQLNL VTTWLQLQIP RIEDGNNFGV AVQEKVFLM
TSLHTKLEGF HTQISKYFSE RGDVTKAAK QPHVGDYRQL VHELDEAEYR DIRLMVMEIR NAYAVLYDII LKNFEKLLKP
RGETKGMIV
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