

Product datasheet for RC202786

PSMA4 (NM_002789) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMA4 (NM_002789) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSMA4
Synonyms:	HC9; HsT17706; PSC9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202786 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCTCGAAGATATGACTCCAGGACCACTATATTTTCTCCAGAAGTCGCTTATACCAAGTTGAATATG
CCATGGAAGCTATTGGACATGCAGGCACCTGTTTGGGAATTTAGCAAATGATGGTGTTTTGCTGCAGC
AGAGAGACGCAACATCCACAAGCTTCTTGATGAAGTCTTTTTTCTGAAAAATTTATAAACTCAATGAG
GACATGGCTTGCAGTGTGGCAGGCATAACTTCTGATGCTAATGTTCTGACTAATGAACTAAGGCTCATTG
CTCAAAGTATTTATTACAGTATCAGGAGCCAATACCTTGTGAGCAGTTGGTTACAGCGCTGTGTGATAT
CAAACAAGCTTATACACAATTTGGAGGAAAACGTCCTTTGGTGTTCATTGCTGTACATTGGCTGGGAT
AAGCACTATGGCTTTTCAGCTCTATCAGAGTGACCTAGTGAAATACGGGGGATGGAAGGCCACATGCA
TTGGAAATAATAGCGCTGCAGCTGTGTCAATGTTGAAACAAGACTATAAAGAAGGAGAAATGACCTTGAA
GTCAGCACTTGCTTTAGCTATCAAAGTACTAAATAAGACCATGGATGTTAGTAACTCTCTGCTGAAAA
GTGGAAATTGCAACACTAACAAGAGAGAATGGAAGACAGTAATCAGAGTTCTCAAACAAAAAGAAGTGG
AGCAGTTGATCAAAAAACAGGAGGAAGAAGAAGCCAAAGCTGAGCGTGAGAAGAAAGAAAAAGAACAGAA
AGAAAAGGATAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202786 protein sequence
Red=Cloning site Green=Tags(s)

MSRRYDSRTTIFSPGRLYQVEYAMEAIGHAGTCLGILANDGVLLAAERRNIHKLLDEVFFSEKIYKLNEDMACSVAGITSDANVLNELLRLIAQRYLLQYQEPICEQLVTALCDIKQAYTQFGGKRPFGVSLLYIGWDKHYGFQLYQSDPSGNYGGWKATCIGNNSAAAVSMLKQDYKEGEMTLKSALALAIKVLNKTMDVSKLSAEKVEIATLTRENGKTVIRVLKQKEVEQLIKKHEEEEEAKAEREKKEKEKQEKDK

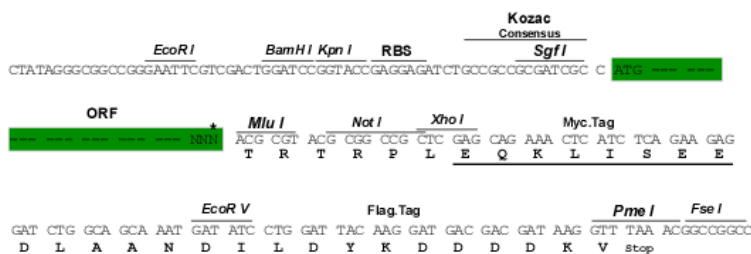
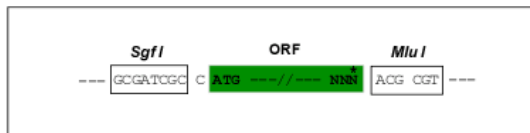
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6415_g11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002789

ORF Size: 783 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_002789.2](#)

RefSeq Size: 1235 bp

RefSeq ORF: 786 bp

Locus ID: 5685

UniProt ID: [P25789](#)

Cytogenetics: 15q25.1

Domains: proteasome

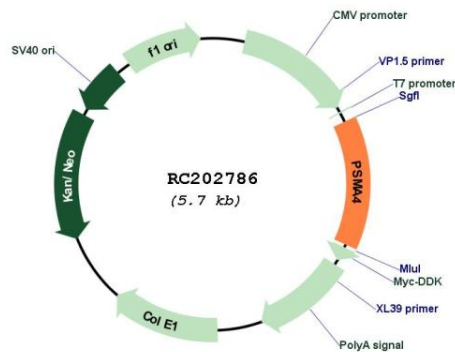
Protein Families: Druggable Genome, Protease

Protein Pathways: Proteasome

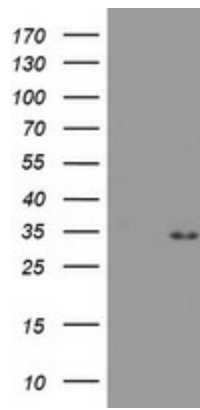
MW: 29.5 kDa

Gene Summary: This gene encodes a core alpha subunit of the 20S proteasome, which is a highly ordered ring-shaped structure composed of four rings of 28 non-identical subunits. Proteasomes cleave peptides in an ATP- and ubiquitin-dependent manner. [provided by RefSeq, Aug 2016]

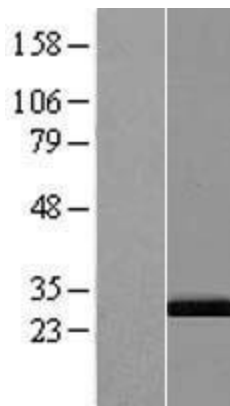
Product images:



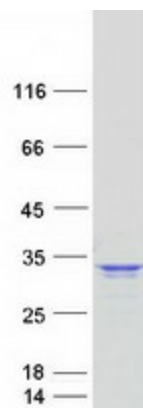
Circular map for RC202786



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PSMA4 (Cat# RC202786, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PSMA4(Cat# [TA504059]). Positive lysates [LY419117] (100ug) and [LC419117] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY420186]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC220385] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMA4 protein (Cat# [TP302786]). The protein was produced from HEK293T cells transfected with PSMA4 cDNA clone (Cat# RC202786) using MegaTran 2.0 (Cat# [TT210002]).