

Product datasheet for RC205723

Proteasome subunit beta type 4 (PSMB4) (NM_002796) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Proteasome subunit beta type 4 (PSMB4) (NM_002796) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSMB4
Synonyms:	HN3; HsN3; PRAAS3; PROS-26; PROS26
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC205723 representing NM_002796 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGCGTTTTGGGGTCGCGGTCCGGACTTTGGCGGGGGTCCGGCCCCAGGACAGTTTTACCGCA
TTCCATCCACTCCCGATTCTTCATGGATCCGGCGTCTGCACTTTACAGAGGTCCAATCACGCGGACCCA
GAACCCATGGTGACCGGACCTCAGTCCTCGGCGTTAAGTTCGAGGGCGGAGTGGTATTGCCGCAGAC
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CCATGCTGGGTGCCTCTGGCGACTACGCTGATTTCCAGTATTTGAAGCAAGTTCTCGGCCAGATGGTGT
TGATGAGGAGCTTCTGGGAGATGGACACAGCTATAGTCCTAGAGCTATTCATTATGGCTGACCGGGCC
ATGTACAGCCGGCGCTCGAAGATGAACCTTTGTGGAACCATGGTCATCGGAGGCTATGCTGATGGAG
AGAGCTTCCTCGGTTATGTGGACATGCTGGTGTAGCCTATGAAGCCCCCTCGCTGGCCACTGGTTATGG
TGCATACTTGGCTCAGCCTCTGCTGCGAGAAGTCTGGAGAAGCAGCCAGTGCTAAGCCAGACCGAGGCC
CGCGACTTAGTAGAACGCTGCATGCGAGTGCTGTACTACCGAGATGCCCGTTCTTACAACCGGTTTCAA
TCGCCACTGTACCGAAAAGGTGTTGAAATAGAGGGACCATTGTCTACAGAGACCAACTGGGATATTGC
CCACATGATCAGTGGCTTTGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205723 representing NM_002796
 Red=Cloning site Green=Tags(s)

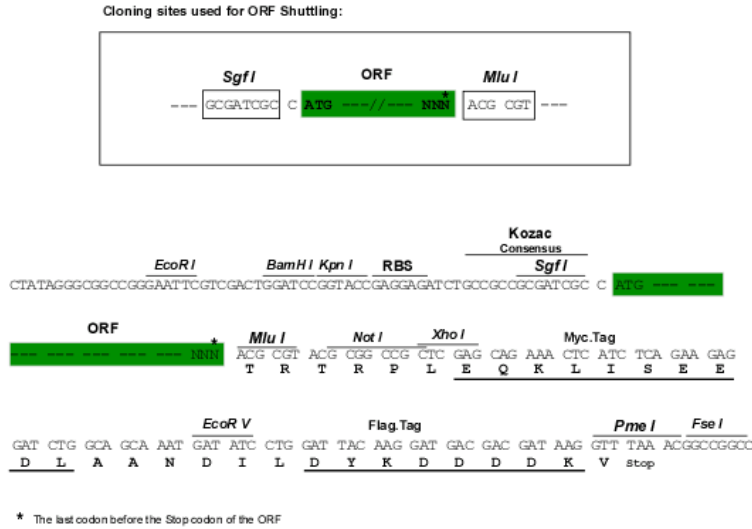
MEAF LGSRSGLWAGGPAPGQFYRIPSTPDSFMDPASALYRGPITRTQNPMVTGTSVLGVKFEGGVVIAAD
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 MYSRRSKMNP LWN TMVIGGYADGESFLGYVDMLGVAYEAPSLATGYGAYLAQPLLREVLEKQPVLSQTEA
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

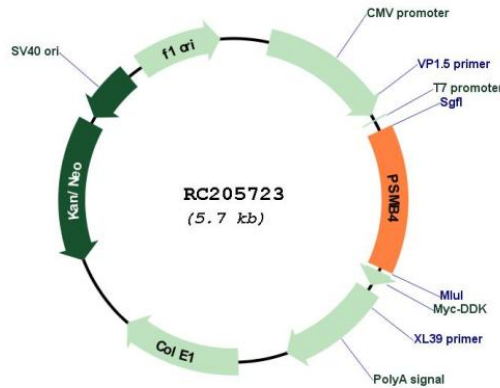
Chromatograms: https://cdn.origene.com/chromatograms/mk6063_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

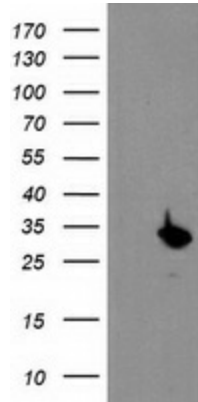


Plasmid Map:

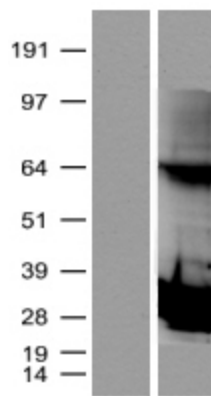


ACCN: NM_002796

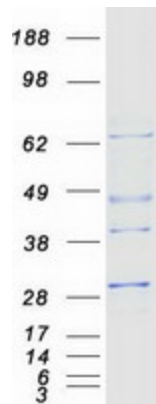
ORF Size:	792 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. 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.
RefSeq:	NM_002796.3
RefSeq Size:	925 bp
RefSeq ORF:	795 bp
Locus ID:	5692
UniProt ID:	P28070 , A0A140VK46
Domains:	proteasome
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Proteasome
MW:	29 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 proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. [provided by RefSeq, Jul 2008]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PSMB4 (Cat# RC205723, 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-PSMB4(Cat# [TA503558]). Positive lysates [LY419106] (100ug) and [LC419106] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419106]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205723 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMB4 protein (Cat# [TP305723]). The protein was produced from HEK293T cells transfected with PSMB4 cDNA clone (Cat# RC205723) using MegaTran 2.0 (Cat# [TT210002]).