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Product datasheet for RC224611

PSMB8 (NM_148919) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSMB8 (NM_148919) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSMB8
Synonyms:	ALDD; D6S216; D6S216E; JMP; LMP7; NKJO; PRAAS1; PSMB5i; RING10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC224611 representing NM_148919
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCTACTAGATGTATGCGGAGCCCCCCGAGGGCAGCGGCCGGAATCGGCTCTCCCGGTTGCGGGAA
GCGGGCGTCGCTCGGACCCAGGACACTACAGTTTCTCTATGCGATCTCCAGAGCTCGCTTTACCCCGGGG
AATGCAGCCCACAGAATTCTTCCAGTCCCTGGGTGGGGACGGAGAAAGGAACGTTCAGATTGAGATGGCC
CATGGCACCACCACGCTCGCCTTCAAGTTCCAGCATGGAGTGATTGCAGCAGTGGATTCTCGGGCCTCAG
CTGGGTCCTACATTAGTGCCTTACGGGTGAACAAGGTGATTGAGATTAACCCTTACCTGCTTGGCACCAT
GTCTGGCTGTGCAGCAGACTGTCAGTACTGGGAGCGCCTGCTGGCCAAGGAATGCAGGCTGTACTATCTG
CGAAATGGAGAACGTATTTCAGTGTCGGCAGCCTCCAAGCTGCTGTCCAACATGATGTGCCAGTACCGGG
GCATGGGCCTCTCTATGGGCAGTATGATCTGTGGCTGGGATAAGAAGGGTCCTGGACTCTACTACGTGGA
TGAACATGGGACTCGGCTCTCAGGAAATATGTTCTCCACGGGTAGTGGGAACACTTATGCCTACGGGGTC
ATGGACAGTGGCTATCGGCCTAATCTTAGCCCTGAAGAGGCCTATGACCTTGGCCGCAGGGCTATTGCTT
ATGCCACTCACAGAGACAGCTATTCTGGAGGCGTTGTCAATATGTACCACATGAAGGAAGATGGTTGGGT
GAAAGTAGAAAGTACAGATGTCAGTGACCTGCTGCACCAGTACCGGGAAGCCAATCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC224611 representing NM_148919
Red=Cloning site Green=Tags(s)

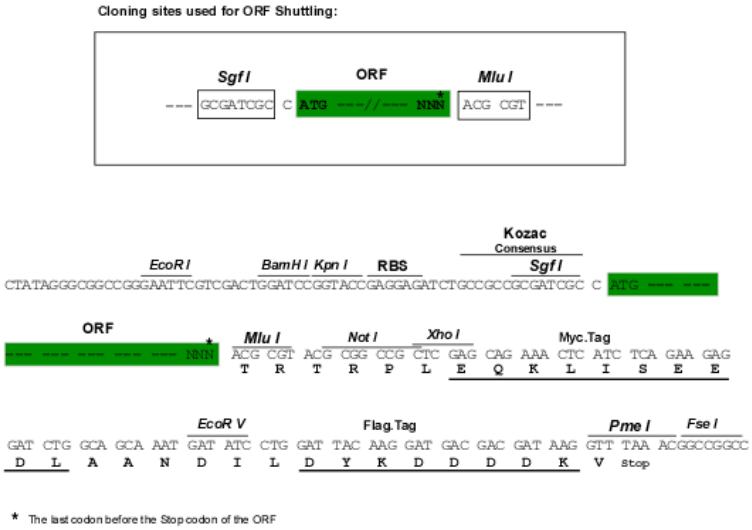
MALLDVCGAPRGQRPESALPVAGSGRRSDPGHYSFSMRSPELALPRGMQPTEFFQSLGGDGERNVQIEMA
HGTTTLAFKFQHGVIAAVDSRASAGSYISALRVNKVIEINPYLLGTMSGCAADCQYWERLLAKECRLYYL
RNGERISVSAASKLLSNMMCQYRGMGLSMGSMICGWDKKGPGLYYVDEHGTRLSGNMFSTGSGNTYAYGV
MDSGYRPNLSPEEAYDLGRRAIAYATHRDSYSGGVVNMYHMKEDGWVKVESTDVSDLLHQYREANQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2889_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_148919

ORF Size: 828 bp

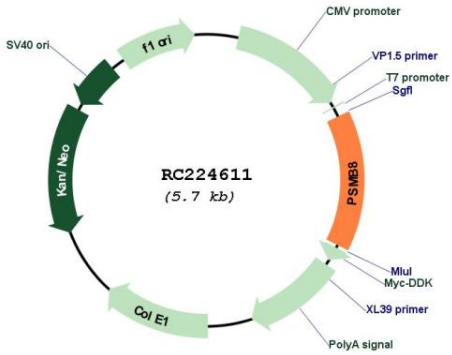
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

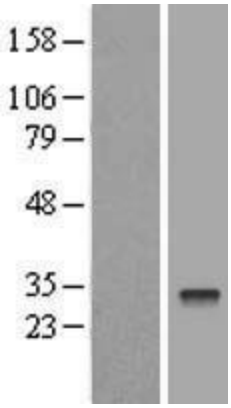
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
RefSeq:	NM_148919.4
RefSeq Size:	1135 bp
RefSeq ORF:	831 bp
Locus ID:	5696
UniProt ID:	P28062
Cytogenetics:	6p21.32
Domains:	proteasome
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Proteasome
MW:	30.2 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. This gene is located in the class II region of the MHC (major histocompatibility complex). Expression of this gene is induced by gamma interferon and this gene product replaces catalytic subunit 3 (proteasome beta 5 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. Two alternative transcripts encoding two isoforms have been identified; both isoforms are processed to yield the same mature subunit. [provided by RefSeq, Jul 2008]

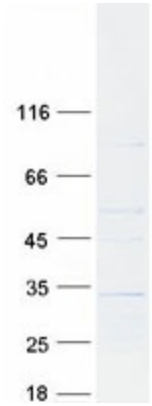
Product images:



Circular map for RC224611



Western blot validation of overexpression lysate (Cat# [LY407730]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224611 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSMB8 protein (Cat# [TP324611]). The protein was produced from HEK293T cells transfected with PSMB8 cDNA clone (Cat# RC224611) using MegaTran 2.0 (Cat# [TT210002]).