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Product datasheet for MG204368

Psmd14 (NM_021526) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Psmd14 (NM_021526) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Psmd14
Synonyms:	2610312C03Rik; 3200001M20Rik; AA986732; Pad1; Poh1; rpm11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG204368 representing NM_021526
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACAGACTTCTTAGACTTGGAGGAGGTATGCCTGGACTGGGCCAGGGCCCACCTACAGATGCTCCTG
CCGTGGACACAGCAGAACAAGTTTATATCTCTTCCTTGGCCTTGCTAAAGATGTTAAAACATGGTCGTGC
TGGAGTGCCTATGGAAGTTATGGGTCTAATGCTTGGTGAATTTGTTGATGATTACACCGTCAGAGTGATT
GATGTGTTTGCTATGCCACAGTCAGGAACTGGTGTCAGTGTTGAAGCAGTTGATCCAGTGTTCCAAGCCA
AAATGTTGGATATGCTGAAACAAACAGGAAGGCCCGAGATGGTTGTTGGTTGGTATCACAGTCACCCTGG
CTTTGGCTGTTGGCTTTCTGGTGTGGATATCAACACTCAGCAGAGCTTTGAAGCCTTGTCGGAGAGAGCT
GTGGCAGTGGTTGTGGATCCCATTCAGAGTGTAAAAGGAAAGGTTGTTATTGATGCCTTCAGACTGATCA
ATGCTAATATGATGGTCTTAGGACATGAACCAAGACAAACGACTTCAAATCTGGGCCACTTAAACAAGCC
ATCTATCCAGGCATTAATTCACGGACTAAACAGACATTATTACTCCATCACTATTAATTACCGGAAAAAT
GAACTGGAACAGAAGATGCTGTTAAATTTGCATAAGAAGAGTTGGATGGAAGGATTGACACTTCAGGACT
ACAGTGAACACTGTAAACACAATGAATCGGTGGTAAAAGAAATGTTGGAATTAGCCAAGAATTATAATAA
GGCTGTGGAAGAAGAAGATAAGATGACACCTGAACAGCTGGCAATAAAGAATGTTGGCAAGCAGGATCCC
AAACGTCATTTGGAAGAACATGTGGATGTGCTTATGACTTCAAATATTGTCCAGTGTTTGGCCGCAATGT
TGGATACTGTTGTATTTAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

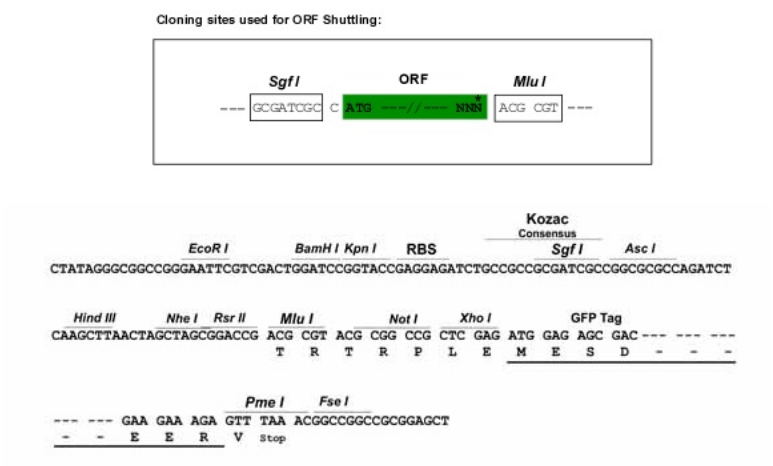
>MG204368 representing NM_021526
Red=Cloning site Green=Tags(s)

MDRLLRLGGGMPGLGQGPPTDAPAVDTAEQVYISSLALLKMLKHGRAGVPMEVMGLMLGEFVDDYTVRVI
DVFAMPQSGTGVSVEAVDPVFQAKMLDMLKQTGRPEMVVGWYHSHPGFGCWLSGVDINTQQSFEALSERA
VAVVVDPIQSVKGKVVIDAFRLINANMMVLGHEPRQTTSNLGHLNKPSIQALIHGLNRHYYSITINYRKN
ELEQKMLLNLHKKSWMEGLTLQDYSEHCKHNESVVKEMLELAKNYNKAVEEEDKMTPEQLAIKNVGKQDP
KRHLEEHVDVLMTSNIVQCLAAMLDTVVFK

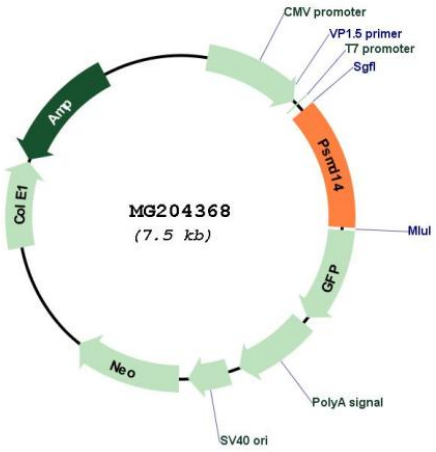
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_021526

ORF Size: 927 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_021526.2
RefSeq Size:	1479 bp
RefSeq ORF:	933 bp
Locus ID:	59029
UniProt ID:	O35593
Cytogenetics:	2 C1.3
Gene Summary:	Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. The PSMD14 subunit is a metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains within the complex. Plays a role in response to double-strand breaks (DSBs): acts as a regulator of non-homologous end joining (NHEJ) by cleaving 'Lys-63'-linked polyubiquitin, thereby promoting retention of JMJD2A/KDM4A on chromatin and restricting TP53BP1 accumulation. Also involved in homologous recombination repair by promoting RAD51 loading.[UniProtKB/Swiss-Prot Function]