

Product datasheet for **MG208541**

Pitrm1 (BC006917) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pitrm1 (BC006917) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pitrm1
Synonyms:	MP1, mKIAA1104, Ntup1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG208541 representing BC006917
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGCCAGACGACAAGTATTATGAAAAGCAAACCTCAGATGGAGACAGAAAAGCTGGAGCAAAAAGGTGA
 ATTCTCTCTCCCGGCGGACAAGCAGCAGATCTACGAGAAAAGTTTAGAAGTACAGACGCAGCAAAGTAA
 ACATCAAGACGCCTCCTGCCTCCAGCATTGAAAGTCTCGGACATTGAGCCCTCCATGCCTTTCACCAAG
 CTTGACATCGGCCTTGCAGCTGGAGACATCCCTGTGCAGTACTGCCACAGCCACCAACGGCATGGTGT
 ATTTCCGAGCCTTTCCAGTTTAAACACGCTGCCGGAGGACCTGAGGCCATTGTGCCTCTCTTTTGCAG
 CGTGCTGACCAAGCTGGTTGTGGCATCTTAACACAGAGAGCAAGCCCAACAGATTGAGCTCAAGACA
 GGAGGCATGAGTGTACGCCCATGTGCTCCCTGACGACTCACAGCTGGATACCTACGAGCAGGGTGTGT
 TATTTTCATCTCTGCCTGGAGCGGAACCTGCCAGACATGATGCATCTGTGGAGCGAAAATTTTAAACA
 TCCATGCTTTGAAGAAGAAGAACAACCTTCAAAGTGTGGTGAAGATGACCGCTCAGGAGCTCTCCAATGGA
 ATTTCAGACTCGGGGCATCTCTATGCAGCCCTCAGAGCAAGAACACTGACACCTTCAGGGGACTTGC
 AGGAGACCTTCAGTGGGATGGATCAGGTGAAGGTGATGAAAAGAATTGCAGAGATGACAGACATCAAGCC
 CATCCTGAGAAAAGTCCCGGATCAAGAAGTATCTACTAAACTGTGACAACATGAGATGCTCAGTGAAT
 GCCACCCCTCAGCAGATGCCTCAGGCAGAAAAGAGGTGGAAAACCTCCTTAGAAATGTTGGCCGAAGCA
 AAAAGGAACGGAAGCCTGTCGCCCGCATATTGTGAGAAAACCCACCCAGTGGCCCAAGTGGAGCTGC
 ACATGTGAGTGGTCCCAGATCGTCAGAAAATTGGTGACAGACCCACCTTCAAACCTGCCAGATGAAG
 ACACATTTTGTGCTGCCCTTCCCTGTGAATTACATTGGCGAGTGTGTGAGACTGTCCCCTATGCTGATC
 CAGACCATGCCAGCCTTAAGATCCTTCCCGCTAATGACAGCTAAATTTGCATACGGAAATTCGAGA
 GAAGGGGGTGTATGGTGGCGGTGCTAAACTCACCCACAGTGGGATTTTACGCTTTACTCTTACAGG
 GATCCCAATTCCATAGAAACACTCCAGTCTTTTGGGAAAGCTGTAGACTGGGCTAAGTCTGGAAAGTTCA
 CACAGCAGGACATTGATGAAGCCAAGCTGTCTGTTTTCTACTGTGGATTCTCCTGTTGCTCCATCCGA
 TAAAGGAATGGACCACTTCTGTATGGCCTCTCCGATGAGATGAAGCAGGCATACCGAGAACAGCTCTTT
 GCTGTCAACCACGACAACTGACCTCTGTGAGCCATAAACTTGGCATCGGGAAGAGCACACACGGCC
 TGGCTATCCTCGGACCAGAGAACTCAAAAATTGCCAAGACCCATCATGGATCATAAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG208541 representing BC006917
 Red=Cloning site Green=Tags(s)

MKPDDKYYEKQTMETEKLEQKVNSLSPADKQIYKGLLELQTTQSKHQDASCLPALKVSDIEPSMPFTK
 LDIGLAAGDIPVQYCPQPTNGMVYFRAFSSLNLTLPEDLRPIVPLFCSVLTKLGGCILNYREQAQQIELKT
 GGMSVTPHVLPPDSQLDYEQGVLFSSLCLERNLPDMMHLWSEIFNPNCFEEEEHFVLVKMTAQELNSG
 ISDSGHLAALRASKTLTPSGDLQETFSGMDQVKVMKRIAEMTDIKPILRKLPRIKYLLNCDNMRCNVN
 ATPQQMPQAEKEVENFLRNVGRSKKERKPVPHIVEKPTSPGSGAAHVSGSQIVRKLVTDPFKPCQMK
 THFVLPFPVNYIGECVRTVPYADPDHASLKILARLMTAKFLHTEIREKGGAYGGGAKLTHSGIFTLYSYR
 DPNSIETLQSFQKAVDWAKSGKFTQQDIDEAKLSVSTVDSPVAPSDKGMDFLYGLSDEMKAQYREQLF
 AVNHDKLTSVSHKYLIGKSTHGLAILGPENSKIAKDPSWIK

TRTRPLE – GFP Tag – V

Restriction Sites:

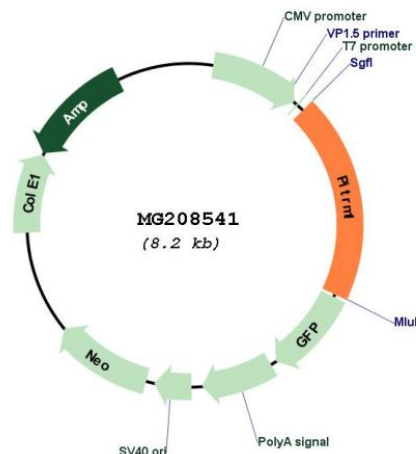
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:	BC006917
ORF Size:	1601 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:	<ol style="list-style-type: none">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:	BC006917 , AAH06917
RefSeq Size:	2237 bp
RefSeq ORF:	1601 bp
Locus ID:	69617
Cytogenetics:	13 A1
Gene Summary:	Metalloendopeptidase of the mitochondrial matrix that functions in peptide cleavage and degradation rather than in protein processing. Has an ATP-independent activity. Specifically cleaves peptides in the range of 5 to 65 residues. Shows a preference for cleavage after small polar residues and before basic residues, but without any positional preference. Degrades the transit peptides of mitochondrial proteins after their cleavage. Also degrades other unstructured peptides. It is also able to degrade amyloid-beta protein 40, one of the peptides produced by APP processing, when it accumulates in mitochondrion. It is a highly efficient protease, at least toward amyloid-beta protein 40. Cleaves that peptide at a specific position and is probably not processive, releasing digested peptides intermediates that can be further cleaved subsequently.[UniProtKB/Swiss-Prot Function]