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Product datasheet for RC210596

PITRM1 (NM_014889) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PITRM1 (NM_014889) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PITRM1
Synonyms:	MP1; PreP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC210596 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGCGCTGCGGCGGGCGGCAGGGCCTGTGTGTGCTGAGGCGGCTGAGCGGCGGACATGCACACCACA
GAGCGTGGCGATGGAACAGTAACCGGGCTTGTGAGAGGGCTCTGCAGTATAAACTAGGAGACAAGATCCA
TGGATTCACCGTAAACCAGGTGACATCTGTTCCCGAGCTGTTCCTGACTGCAGTGAAGCTCACCCATGAT
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CCACTCCCATGGACAGTACTGGTGTTCCTCACATTCTTGAGCATACTGTCCTTTGTGGGTCTCAGAAATA
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AGTGATTATACTGTGTATCCATTTTCCACACAAAATCCCAAGGACTTTCAGAATCTCCTCTCGGTGTATT
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GAATCCGAGCGACCCCCAGACGCCCTTGGTCTTTAAAGGAGTCGTCTTTAATGAGATGAAGGGAGCGTTT
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TCACTCTTGACTTCTGGGCCCAATTCTCCCTTTTACAAAGCCTTGATTGAATCTGGCCTTGGCACAGACT
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GGGAAATCAGTTAGCTAAATTCAGACAGTGCCTGCAGGAAAATCCAAAATTTTTGCAAGAAAAAGTAAAA

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CAGTATTTTAAGAATAACCAGCATAAGCTGACTTTATCGATGAGGCCAGATGACAAGTATCACGAGAAGC
AGGCACAGGTGGAAGCCACGAAGCTCAAGCAGAAGGTCGAGGCTCTGTCCCCCGGAGACAGGCAGCAGAT
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AATTGCCAAGGACCCATCCTGGATCATCCGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210596 protein sequence
Red=Cloning site Green=Tags(s)

MWRCGGRQGLCVLRRLSGGHAHHRAWRWNSNRACERALQYKLGDKIHGFTVNQVTSVPELFLTAVKLTHD
DTGARYLHLAREDTNNLFSVQFRTTPMDSTGVPHILEHTVLCGSQKYPCRDPFFKMLNRSLSTFMNAFTA
SDYTVYPFSTQNPKDFQNLLSVYLDATFFPCLRELDFWQEGWRLEHENPSDPQTPLVFKGVVFNEMKGAF
TDNERIFSQHLQNRLLPDHTYSVVSGGDPLCIPELTWEQLKQFHATHYHPSNARFFTYGNFPLEQHLKQI
HEEALSKFQKIEPSTVVPAQTPWDKPREFQITCGPDSFATDPSKQTTVSVSFLLPDITDTFEAFTLSLLS
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QYFKNNQHKLTLSMRPDDKYHEKQAQVEATKLKQKVEALSPGDRQQIYEKGLELRSQQSKPQDASCLPAL
KVSDIEPTIPVTELDVVLTAGDIPVQYCAQPTNGMVYFRAFSSLNTLPEELRPYVPLFCSVLTKLGCGLL
DYREQAQQIELKTGGMSASPHVLPDDSHMDTYEQGVLFSSLCLDRNLPDMMQLWSEIFNNPCFEEEEHFK
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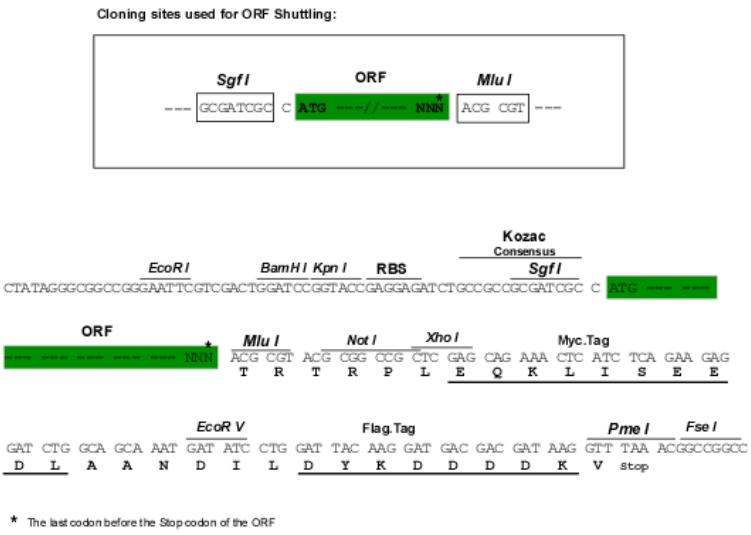
KLSHNGIFTLYSYRDPNTIETLQSFGKAVDWAKSGKFTQQDIDEAKLSVFSTVDAPVAPSDKGMDHFLYG
LSDEMKQAHREQLFAVSHDKLLAVSDRYLGTGKSTHGLAILGPENPKIAKDPSWIIR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6717_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014889

ORF Size: 3111 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

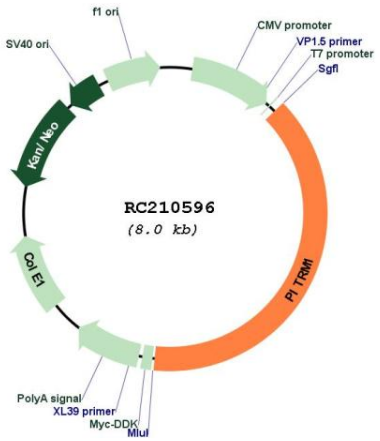
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in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

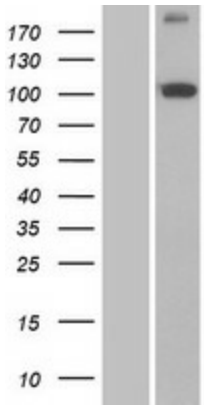
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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 Size:	3505 bp
RefSeq ORF:	3114 bp
Locus ID:	10531
UniProt ID:	Q5JRX3
Cytogenetics:	10p15.2
Domains:	Peptidase_M16_C
Protein Families:	Druggable Genome, Protease
MW:	117.5 kDa
Gene Summary:	The protein encoded by this gene is an ATP-dependent metalloprotease that degrades post-cleavage mitochondrial transit peptides. The encoded protein binds zinc and can also degrade amyloid beta A4 protein, suggesting a possible role in Alzheimer's disease. [provided by RefSeq, Dec 2016]

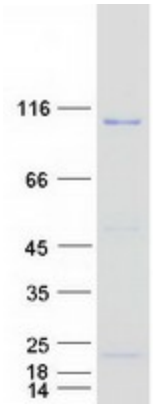
Product images:



Circular map for RC210596



Western blot validation of overexpression lysate (Cat# [LY414960]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210596 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PITRM1 protein (Cat# [TP310596]). The protein was produced from HEK293T cells transfected with PITRM1 cDNA clone (Cat# RC210596) using MegaTran 2.0 (Cat# [TT210002]).