

Product datasheet for **MC223280**

Pitrm1 (NM_145131) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pitrm1 (NM_145131) Mouse Untagged Clone
Tag: Tag Free
Symbol: Pitrm1
Synonyms: 2310012C15Rik; AA410010; mKIAA1104; MP-1; MP1; Ntup1; PreP
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223280 representing NM_145131
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTGGCGCTTCAGCGGTTCGGCGGGGACTCTGCGCTGTACAGCGGCTGAGCTGCGGCAGGGTACACCACA
GAGTATGGAGGGAGAAGAGTGACCAAGCCTGTGAACGAGCTCTACAGTATAAAGTGGGAGAGAAAATCCA
CGGTTCACTGTAACCAGGTCCTCTGTCCCGAGCTGTTCCCTGACAGCCGTGAAGCTCAGCCATGAC
AACACGGGAGCCAGATACCTGCACCTGGCAAGGAAGACAAGAACAATTATTCAGTGTGCAATTCGCA
CAACCCCAATGGATAGCACTGGGGTCCACATGTTCTCGAGCATACGGTCTGTGCGGCTCTCAGAAGTA
CCCGTGCAGAGATCCTTTCTTCAAAATGCTCAACAGGTCCTGTCCACATTTATGAATGCCATGACAGCC
AGCGATTACAGTATATCCGTTTTCACTCAAAATCCCAAAGATTTTCAGAACCCTCTCCGTGTATT
TGGATGCAACTTTCTCCCTGCTTGAGGGAACGGACTTCTGGCAGGAAGGATGGCGTCTGGAGCATGA
GAATCCCCGAGACCCTCAGACGCCCTTGATCTTTAAGGGGTCGTCTTCAACGAGATGAAAGGGCATT
ACAGACAATGAGAGGATATTCTCCAGCACCTGCAGACAAGCTGCTTCCCTGACCACACCTACTCCGTGG
TTTCTGGAGGGGACCACTGTGCATCCCGGAGCTCACGTGGGAACAGCTGAAACAGTTCCACGCTACTCA
TTATCACCAAGCAATGCCAGTTCTTCACTTATGGCAATTTTCAGCTGGAAGGACACCTGAAACAAATT
CACGAAGAAGCCCTGAGTAAATTCAGAGATTGGAGCAGAGTACAGCAGTGCCTGCCAGCCGCACTGGG
ATAAGCCTAGGGAATTCATATAACATGTGGCCAGATTCAGTACGAGACTGCCAAGCAGACAAC
TGTGAGCGTTAGCTTCTTACCAGGATACACTGACACATTTGAAGCCTTACCTTGAGCCTTCTGTCC
TCCCTCTGATTGCTGGACCAACTCCCTTCTACAAAGCTTTGATCGAGTCTGGACTCGGCACAGACT
TTTCTCCTGATGTTGGATATAATGGCTATACACGGGAGGCTTACTTCAGTGTGCGGCTCCAAGGGATCGC
AGAGAAAGATGTCAAGACGGTCAGAGAGCTCGTAGACAGGACAATCGAAGAAGTTATAGAGAAAGGATTT
GAAGATGATCGGATTGAAGCTCTGCTTCATAAAATCGAAATTCAAACGAAGCATCAGTCAGCCAGCTTTG
GCCTGACCCTGACGTATATAGCTTCTTGTGGAACCATGATGGGACCCCTGTGGAGCTCTGCAGAT
TGGAAAGTCAGCTGACTAGATTTAGGAAGTGCTTAAGGAAAATCCAAAATTTTTACAAGAAAAGTAGAA
CAATATTTAAGAACAATCAGCACAAGCTGACTTTATCCATGAAGCCAGACGACAAGTATTATGAAAAGC



[View online »](#)

```

AAACTCAGATGGAGACAGAAAAGCTGGAGCAAAAGGTGAATTCTCTCTCCCCGGCGGACAAGCAGCAGAT
CTACGAGAAAAGTTTAGAACTACAGACGCAGCAAAGTAAACATCAAGACGCCTCTGCTCCCAGCATTG
AAAGTCTCGGACATTGAGCCCTCCATGCCTTTCACCAAGCTTGACATCGGCCTTGACGCTGGAGACATCC
CTGTGCAGTACTGCCACAGCCCACCAACGGCATGGTGTATTTCCGAGCCTTTCCAGTTTAAACACGCT
GCCGGAGGACCTGAGGCCATTGTGCCTCTTTTTGCAGCGTGTGACCAAGCTGGGTTGTGGCATCCTT
AACTACAGAGAGCAAGCCCAACAGATTGAGCTCAAGACAGGAGGCATGAGTGTACGCCCCATGTGCTCC
CTGACGACTCACAGCTGGATACCTACGAGCAGGTGTGTTATTTTCATCTCTGCTGGAGCGGAACCT
GCCAGACATGATGCATCTGTGGAGCGAAATATTTAAACAATCCATGCTTTGAAGAAGAAGAACTTCAAA
GTGTTGGTGAAGATGACCCTCAGGAGCTCTCCAATGGAATTTACAGACTCGGGGCATCTCTATGCAGCCC
TCAGAGCAAGCAAGACACTGACACCTTCAGGGGACTTGCAGGAGACCTTCAGTGGGATGGATCAGGTGAA
GGTGATGAAAAGAATTGCAGAGATGACAGACATCAAGCCCATCTGAGAAAAGTCCCGGATCAAGAAG
TATCTACTAAACTGTGACAACATGAGATGCTCAGTGAATGCCACCCCTCAGCAGATGCCTCAGGCAGAAA
AAGAGGTGAAAACCTTCTTAGAAATGTTGGCCGAAAGCAAAAAGGAACGGAAGCCTGTCCGCCGCATAT
TGTCGAGAAAACCCACCCAGTGGCCCCAGTGGAGCTGCACATGTCAGTGGTCCCAGATCGTCAGAAAA
TTGGTGACAGACCCACCTTCAAACCTGCCAGATGAAGACACATTTTGTGCTGCCCTTCCCTGTGAATT
ACATTGGCGAGTGTGTCAGGACTGTCCCGTATGCTGATCCAGACCATGCCAGCCTTAAGATCCTTGCCCG
TCTAATGACAGCTAAATCTTGACATACGAAAATTCGAGAGAAGGGGGTCTTATGGTGGCGGTGCTAAA
CTCACCCACAGTGGGATTTTACGCTTTACTCTTACAGGGATCCCAATTCATAGAAACTCCAGTCTT
TTGGGAAAGCTGTAGACTGGGCTAAGTCTGAAAGTTCACACAGCAGGACATTGATGAAGCCAAGCTGTC
TGTTTTCTCTACTGTGGATTCTCTGTTGCTCCATCCGATAAAGGAATGGACCATTCTTGTATGGCCTC
TCCGATGAGATGAAGCAGGCATACCGAGAACAGCTCTTTGCTGTCAACCACGACAAACTGACCTCTGTGA
GCCATAAATACCTTGGCATCGGGAAGAGCACACACGGCCTGGCTATCCTCGGACCAGAGAAGTCAAAAAT
TGCCAAAGACCCATCATGGATCATAAAATAA

```

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_145131

Insert Size:

3111 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_145131.1, NP_660113.1

RefSeq Size:

3547 bp

RefSeq ORF:

3111 bp

Locus ID: 69617

UniProt ID: [Q8K411](#)

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]