

Product datasheet for **MC221579**

Pnpt1 (NM_027869) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pnpt1 (NM_027869) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pnpt1
Synonyms:	1200003F12Rik; Old35; PNPase; Pnptl1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221579 representing NM_027869
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGCTGCAGGCTGTGCTGCTTGTGCCCGTGCCTCCGACCGCTGGGCTGCGGCCCCCTCGGCCGGC
 CCGGGCGGAATCGGGCACTCAGCTATTTGCAGATGCGAGCGTTGTGGAGCAGCACCGGATCCAGAGCGGT
 GACTGTAGACCTGGGACACAGAAAATTAGAAAATCCTCTGGGAAACTGGCAAGATTTGCTGATGGCTGT
 GCTGTGATACAGTCAGGCGATACTGCAGTAATGGTCACGGCAGTCAGAAAAAAAAGCTTCGCCTTCCC
 AATTCATGCCGTTGGTGGTGGACTACCGACAGAAGGCTGCTGCAGCAGGCAGAATCCCCACAACTACCT
 TAGAAGGGAGATTGGCTCCTCTGACAGAGAGGTTCTTACAAGTCGAGTAATAGATCGTTCAATTCGCCCT
 CTCTTTCCAGCCGGCTATTTTTATGATACTCAGGTTCTCTGTAATCTGCTAGCAGTAGATGGCATCAATG
 AACCTGATATCCTAGCAGTTAATGGTCTTCTGTAGCCCTCTCCTTATCAGATATCCCTTGAATGGACC
 TGTTGGGGCAGTACGAATAGGAATGATTGATGGAGAATGTGTCGTTAACCCAACAAGGAGAGAAATGTCT
 TCTAGCACTTTAAATTTAGTAGTTGCCGGAGCACCTAAAAGCCAAATTTGTTATGTTGGAAGCCTCTCGAG
 AAAATATTCTACAGCAGGACTTTTGCCATGCTATCAAAGTTGGGGTGAAGTATACACAGCAGATAATTCA
 GGGCATCCAGCAGTTGGTAAAAGAAATCGGTGTTGCCAAGAGGACACCGCAGAAGATATTTACTCCTTCT
 GCAGAGATTGTGAAGTACACGAAGATAATTGCCATGGAGAACTCTATGCGGTTTTTACAGATTATGAAC
 ATGATAAAGTTTCCAGGGATGAAGCTGTTAACAAGATAAGATTAGATACAGAGGAGCATCAAAGGAAAA
 ATTTCCAGAGGTTGACCAATTTGAAATAATAGAATCCTTCAACATTGTTGCAAAGGAGGTTTTCCGAAGT
 ATATTTTTGAATGAATACAAAAGGTGTGATGGAAGAGATCTGACTTCACTTAGGAATATAAGTTGTGAGG
 TCGATATGTTTTAAAACACTTCATGGATCAGCATTATTTCCAGAGAGGACAAACACAGGTACTGTACTGT
 TACATTTGATTCATTAGAAATCCAGTATTAAGTCAGATCAAATTATAACAGCTATAAATGGGGTAAAAGAT
 AAAAATTTTCATGCTGCACTATGAGTTCCCTCCTTATGCAACCAATGAAACCGGCAAAAGTTACTGGTGTGA
 ATCGAAGAGAACTTGACATGGTCTCTTGCCGAGAAAGCTTTGTGCTCTGTTATTTCCAAAGATTTTCC
 TTTTACCATAAGAGTTACATCTGAAGTCTCGAATCAAATGGGTCATCTTCTATGGCATCTGCATGTGGT
 GGAAGTTTGGCATTAAATGGATGCAGGGTCCCAATTTCTGCTGTTGCAGGTGTAGCAGTGGGATTGG
 TTACCAAAACCAATCCAGAGAAAGGTGAAATAGAAGACTACCGTTTGCTAACAGATATTCTGGGAATTGA
 AGATTATAATGGTGACATGGATTTCAAATAGCCGGTACAATAAAGGAATAACTGCATTACAGGCTGAT
 ATTAAGTTACCTGGAGTACCAATTAATAATGGAAGCCATCCAACAAGCGTCAGTGGCAAAGAAGG
 AGATACTGCAGATAATGAACAAAACGATTTCAAACCTCGAGCATCAAGAAAAGAAAATGGACCAGTTGT
 AGAAACAGTAAAGGTTCCATTATCAAAACGAGCAAAATTCGTTGGGCCTGGTGGATCACTTAAAAAAA
 CTCCAGGCTGAGACAGGTGTAACAATTAGTCAGGTTGATGAAGAAACCTTCTCCATATTTGCACCAACAC
 CTACTGCAATGCATGAAGCAAGAGATTTTACAGAAATTTGCAGAGATGATCAAGAGCAACAATTAGA
 ATTTGGAGCAGTTTATACCGCGACAATAACTGAAATCAGAGACTGGAGTGTGGTAAAACCTGTATCCA
 AACATGACTGCAGTGTGCTTATAAATTCACAACCTGACCAACGAAAGATTAACATCCCCTGCCCCTAG
 GACTAGAGGTTGGCCAAGAAATTCAGGTCAAACTTTGGCCGTGATCCAGCTGATGGAAGAATGAGGCT
 TTCTCGTAAAGTACTTCAGTCTCCAGCTACAACCTGCTCTCAAAACTCTAAATGATAGAAGCAGCATTGTA
 ATGGGAGAGCCTGTCTCACAGTCATCTAACTCTAACCC**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_027869
Insert Size: 2352 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:	<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:	NM_027869.1 , NP_082145.1
RefSeq Size:	2704 bp
RefSeq ORF:	2352 bp
Locus ID:	71701
UniProt ID:	Q8K1R3
Cytogenetics:	11 A3.3
Gene Summary:	RNA-binding protein implicated in numerous RNA metabolic processes. Catalyzes the phosphorolysis of single-stranded polyribonucleotides processively in the 3'-to-5' direction. Mitochondrial intermembrane factor with RNA-processing exoribonuclease activity. Component of the mitochondrial degradosome (mtEXO) complex, that degrades 3' overhang double-stranded RNA with a 3'-to-5' directionality in an ATP-dependent manner. Required for correct processing and polyadenylation of mitochondrial mRNAs. Plays a role as a cytoplasmic RNA import factor that mediates the translocation of small RNA components, like the 5S RNA, the RNA subunit of ribonuclease P and the mitochondrial RNA-processing (MRP) RNA, into the mitochondrial matrix. Plays a role in mitochondrial morphogenesis and respiration; regulates the expression of the electron transport chain (ETC) components at the mRNA and protein levels. In the cytoplasm, shows a 3'-to-5' exoribonuclease mediating mRNA degradation activity; degrades c-myc mRNA upon treatment with IFN β /IFN-beta, resulting in a growth arrest in melanoma cells. Regulates the stability of specific mature miRNAs in melanoma cells; specifically and selectively degrades miR-221, preferentially. Plays also a role in RNA cell surveillance by cleaning up oxidized RNAs. Binds to the RNA subunit of ribonuclease P, MRP RNA and miR-221 microRNA.[UniProtKB/Swiss-Prot Function]