

Product datasheet for **RC208800**

PNPT1 (NM_033109) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PNPT1 (NM_033109) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PNPT1
Synonyms:	COXPD13; DFNB70; old-35; OLD35; PNPASE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC208800 representing NM_033109
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCCTGCAGTACTGCTGCTCGTCCGCTCCGGCCCTGAGCGATGGTCTTTCTTCTGTC
 CACGGCGGGATCGGGCACTCACCCAGTTGCAAGTGCAGCACTATGGAGTAGCGCAGGGTCTCGAGCTGT
 GGCCGTGGACTTAGGCAACAGGAAATTAGAAATATCTTCTGAAAAGCTGGCCAGATTTGCAGATGGCTCT
 GCTGTAGTACAGTCAAGTACACTGCAGTAATGGTACAGCGGTGAGTAAAAACAAACCTTCCCCTTCCC
 AGTTTATGCCTTTGGTGGTTGACTACAGACAAAAGCTGCTGCAGCAGGTAGAATCCCACAAACTATCT
 GAGAAGAGAGATTGGTACTTCTGATAAAGAAATCTAACAAAGTGAATAATAGATCGTTCAATTAGACCG
 CTCTTCCAGCTGGCTACTTCTATGATACACAGGTTCTGTGAATCTGTTAGCAGTAGATGGTGAATG
 AGCCTGATGCTAGCAATTAATGGCGCTCCGTAGCCCTCTCATTATCAGATATTCCTTGAATGGACC
 TGTTGGGGCAGTACGAATAGGAATAATTGATGGAGAATATGTTGTTAACCCAACAAGAAAAGAAATGTCT
 TCTAGTACTTTAAATTTAGTGGTTGCTGGAGCACCTAAAAGTCAAGTGTGATGTTGGAAGCCTCTGCAG
 AGAACATTTTACAGCAGGACTTTTGCCATGCTATCAAAGTGGGAGTGAAATATACCCAACAATAATTCA
 GGGCATTACAGCAGTTGGTAAAAGAACTGGTGTACCAAGAGGACACCTCAGAAGTTATTTACCCCTTCG
 CCAGAGATTGTGAAATATACTCATAAACTTGCTATGGAGAGACTCTATGCAGTTTTTACAGATTACGAGC
 ATGACAAAGTTTCCAGAGATGAAGCTGTTAACAAAATAAGATTAGATACGGAGGAACAACATAAAAGAAA
 ATTTCCAGAAGCCGATCCATATGAAATAATAGAATCCTTCAATGTTGTTGCAAAGGAAGTTTTAGAAAT
 ATGTTTTGAATGAATACAAAAGGTGCGATGGTGGGATTTGACTTCACTTAGGAATGAAGTTGTGAGG
 TAGATATGTTTTAAAACCTTTCATGGATCAGCATTATTTCAAAGAGGACAAACACAGGTGCTTTGTACCGT
 TACATTTGATTCATTAGAATCTGGTATTAAGTCAAGTCAAGTTATAACAGCTATAAATGGGATAAAAGAT
 AAAAATTTTCATGCTGCACTACGAGTTTCTCTCTTATGCAACTAATGAAATTTGGCAAAGTCACTGGTTTAA
 ATAGAAGAGAAGTTGGGCATGGTCTCTTGTGAGAAAAGCTTTGTATCCTGTTATTTCCCGAGATTTTCC
 TTTACCATAAGAGTTACATCTGAAGTCTAGAGTCAAATGGGTCATCTTCTATGGCATCTGCATGTGGC
 GGAAGTTTAGCATTAAATGGATTCAGGGTTCCAATTTCTCTGCTGTTGCAGGCGTAGCAATAGGATTGG
 TCACAAAACCGATCCTGAGAAGGGTGAATAGAAGATTATCGTTTGTGACAGATATTTTGGGAATTGA
 AGATTACAATGGTGACATGGACTTCAAATAGCTGGCACTAATAAAGGAATAACTGCATTACAGGCTGAT
 ATTAATTTACCTGGAATACCAATAAAAAATTTGTGATGGAGGCTATTCACAAGCTTCAGTGGCAAAAAGG
 AGATATTCAGATCATGAACAAAACCTTTTCAAACCTCGAGCATCTAGAAAAGAAAATGGACCTGTTGT
 AGAAACTGTTTCAAGTTCCATTATCAAAAACGAGCAAAAATTTGTTGGACCTGGTGGCTATAACTTAAAAAA
 CTTTCAAGCTGAAACAGGTGTAACCTATTAGTCAAGTGGATGAAGAAACGTTTTCTGTATTTGCACCAACAC
 CCAGTGCATGCATGAGGCAAGAGACTTCACTGAAATCTGCAAGGATGATCAGGAGCAGCAATTAGA
 ATTTGGAGCAGTATATACCGCCACAATAACTGAAATCAGAGATACTGGTGAATGGTAAAATTTATATCCA
 AATATGACTGCGTACTGCTTATAACACACAACCTGATCAACGAAAGATTAAACATCCTACTGCCCTAG
 GATTAGAAGTTGGCCAAGAAATTCAGGTGAAATCTTTGGACGTGACCCAGCCGATGGAAGAATGAGGCT
 TTCTCGAAAAGTCTTCAAGTCCAGCTACAACCGTGGTCAGAACTTTGAATGACAGAAGTAGTATTGTA
 ATGGGAGAACCTATTTACAGTCATCATTAATTCTCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208800 representing NM_033109
Red=Cloning site Green=Tags(s)

MAACRYCCSCLRLRPLSDGPFLLPRRDRALTQLQVRALWSSAGSRAVAVDLGNRKLEISSGKLARFADGS
AVVQSGDTAVMVTAVSKTKPSPSQFMPLVVDYRQKAAAAGRIPTNYLRREIGTSDKEILTSRIIDRSIRP
LFPAGYFYDTQVLCNLLAVDGVNEPDVLAINGASVALSLSDIPWNGPVGAVRIGIIDGEYVVPTRKEMS
SSTLNLVVAGAPKSQIVMLEASAENILQQDFCHAIKVGKVTQQIIQGIQQLVKETGVTKRTPQKLFTPS
PEIVKYTHKLAMERLYAVFTDYEHDKVSREAVNKIRLDTEEQLKEKFPEADPYEIIESFNVVAKEVFERS
IVLNEYKRCDGRDLTSLRNVSCVDMFKTLHGSALEKALYVPIPRDFPFTIRVTSEVLESNGSSSMASACG
KNFMLHYEFPPYATNEIGKVTGLNRRELGHGALAEKALYVPIPRDFPFTIRVTSEVLESNGSSSMASACG
GSLALMDSGVPISAVAGVAIGLVTKTDPEKGEIEDYRLLTDILGIEDYNGDMDFKIAGTNKGITALQAD
IKLPGIPIKIVMEAIQQASVAKKEILQIMNKTISKPRASRKENGPVVETVQVPLSKRAKRVGPGGYNLKK
LQAETGVTISQVDEETFSVFAPTPSAMHEARDFITEICKDDQEQQLEFGAVYTATITEIRDVGVMVCLYP
NMTAVLLHNTQLDQRKIKHPTALGLEVGQEIQVKYFGRDPADGRMRLSRKVLQSPATTVVRTLNDRSSIV
MGEPISQSSSNSQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8113_h06.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_033109

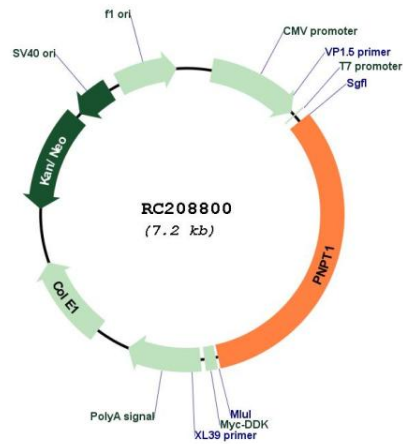
ORF Size: 2349 bp

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.

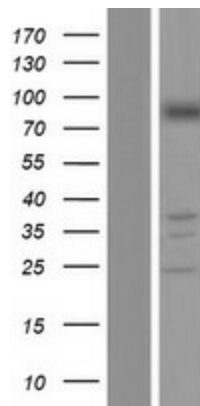
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<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:	<u>NM_033109.5</u>
RefSeq Size:	4579 bp
RefSeq ORF:	2352 bp
Locus ID:	87178
UniProt ID:	<u>Q8TCS8</u>
Cytogenetics:	2p16.1
Domains:	RNase_PH_C
Protein Pathways:	Purine metabolism, Pyrimidine metabolism, RNA degradation
MW:	86 kDa
Gene Summary:	The protein encoded by this gene belongs to the evolutionary conserved polynucleotide phosphorylase family comprised of phosphate dependent 3'-to-5' exoribonucleases implicated in RNA processing and degradation. This enzyme is predominantly localized in the mitochondrial intermembrane space and is involved in import of RNA to mitochondria. Mutations in this gene have been associated with combined oxidative phosphorylation deficiency-13 and autosomal recessive nonsyndromic deafness-70. Related pseudogenes are found on chromosomes 3 and 7. [provided by RefSeq, Dec 2012]

Product images:



Circular map for RC208800



Western blot validation of overexpression lysate (Cat# [LY409716]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208800 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).