

Product datasheet for **MR204327**

PPP4C (NM_019674) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPP4C (NM_019674) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPP4C
Synonyms:	1110002D08Rik; AU016079; Ppx
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204327 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCGGAGATCAGCGACCTGGACCGGCAGATCGAGCAGCTGCGGCGCTGCGAGCTGATCAAGAGAGTG
 AAGTCAAGGCCCTGTGCGCCAAGGCCAGAGAAATCTTGGTAGAAGAGAGCAACGTGCAGAGGGTGGACTC
 GCCAGTCACAGTATGCGGTGACATCCATGGACAATTCTATGACCTCAAGGAGCTGTTAGAGTAGGTGGC
 GATGTCCCTGAGACCAACTACCTCTTCATGGGAGACTTTGTGGACCGTGGTTTCTACAGTGTGAAACCT
 TCCTCCTCCTGCTGGCTCTTAAGGTTTCGCTATCCTGACAGAATCACTTTGATCCGGGGCAATCATGAGAG
 TCGCCAGATTACCCAGGTCTATGGGTTCTACGATGAGTGCTTACGAAATATGGTTCACTGATGTATGG
 CGCTACTGTACTGAGATCTTTGACTACCTCAGCCTGTCTGCCATCATTGATGGCAAGATCTTCTGTGTGC
 ATGGAGGTCTTTCCCTTCCATCCAGACCTTGGACCAGATCCGGACAATTGACCGAAAGCAAGAGGTACC
 CCATGATGGACCATGTGCGACCTCCTGTGGTCTGACCTGAAGACACAACAGGCTGGGGAGTGAGCCCC
 CGCGGGGAGGTTACCTGTTGGCAGTGACGTGGTCGCCAGTTCAATGCAGCCAACGACATTGATATGA
 TCTGCCGTGCCCAATTAAGTATGGAAGGCTACAAGTGGCACTTCAATGAGACCGTGCTTACTGTGTG
 GTCAGCGCCTAATTACTGCTACCGCTGTGGCAATGTGGCAGCCATCTTAGAACTGGATGAGCACCTCCAG
 AAAGATTTTCATCATCTTCGAGGTGCACCCCAAGAGACACGTGGCATCCCTCCTCAAAAAGCCAGTGGCCG
 ACTATTTCTCTG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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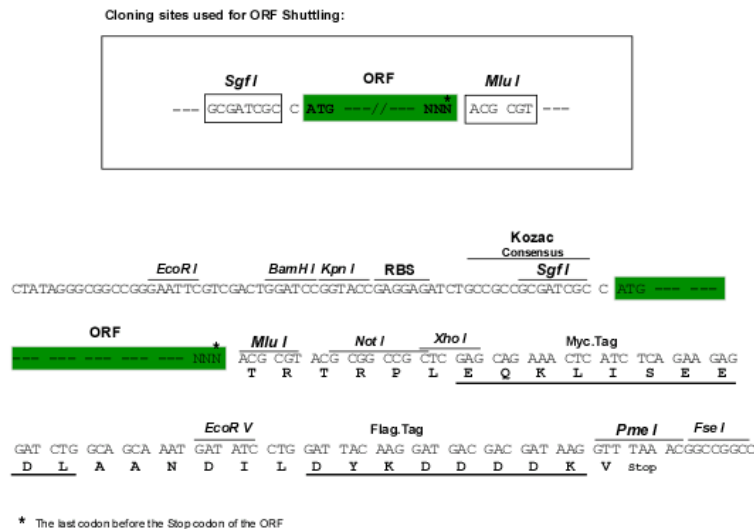
Protein Sequence: >MR204327 protein sequence
 Red=Cloning site Green=Tags(s)

 MAEISDLDRQIEQLRRCELKESEVKALCAKAREILVEESNVQRVDSPTVCGDIHQFYDLKELFRVGG
 DVPETNYLFMGDFVDRGFYSVETFLLLLALKVRYPDRLTIRGNHESRQITQVYGFYDECLRKYGSVTW
 RYCTEIFDYLSLSAIDGKIFCVHGLSPSIQTLQIRTDKQEVPHDGPMDLLWSDPEDTTGWGVSP
 RGAGYLFGSDVVAQFNAANDIDMICRAHQLVMEGYKWHFNETVLTVWSAPNYCYRCGNVAAILELDEHLQ
 KDFIIFEAAPQETRGIPSKKPVADYFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_019674

ORF Size: 921 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:

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_019674.2](#)

RefSeq Size: 1332 bp

RefSeq ORF: 924 bp

Locus ID: 56420

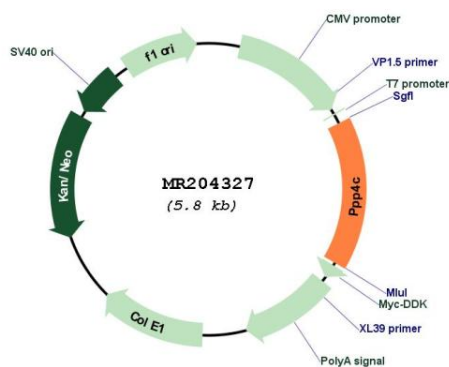
UniProt ID: [P97470](#)

Cytogenetics: 7 F3

MW: 35.1 kDa

Gene Summary: Protein phosphatase that is involved in many processes such as microtubule organization at centrosomes, maturation of spliceosomal snRNPs, apoptosis, DNA repair, tumor necrosis factor (TNF)-alpha signaling, activation of c-Jun N-terminal kinase MAPK8, regulation of histone acetylation, DNA damage checkpoint signaling, NF-kappa-B activation and cell migration. The PPP4C-PPP4R1 PP4 complex may play a role in dephosphorylation and regulation of HDAC3. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AFX phosphorylated on Ser-140 (gamma-H2AFX) generated during DNA replication and required for DNA double strand break repair (By similarity). Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase. In response to DNA damage, catalyzes RPA2 dephosphorylation, an essential step for DNA repair since it allows the efficient RPA2-mediated recruitment of RAD51 to chromatin (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204327