

Product datasheet for SC320616

PPP4C (NM_002720) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: PPP4C (NM_002720) Human Untagged Clone

Tag: Tag Free Symbol: PPP4C

Synonyms: PP-X; PP4; PP4C; PPH3; PPP4; PPX

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_002720.1

CGGTCGAAAGCGGAGTGAAAGAGGGAGGCAGGGAGCCGGAGACCGGAGTCGCA GCGGCGGTAATAGAGACCCCTGTGCGGTGCGGAGGGGGGCGGCCCCGACTCTGACCCG CGCCGGGGTGGCCATGGCGAGATCAGCGACCTGGACCGGCAGATCGAGCAGCTGCGT CGCTGCGAGCTCATCAAGGAGAGCGAAGTCAAGGCCCTGTGCGCTAAGGCCAGAGAGATC TTGGTAGAGGAGAGCAACGTGCAGAGGGTGGACTCGCCAGTCACAGTGTGCGGCGACATC CATGGACAATTCTATGACCTCAAAGAGCTGTTCAGAGTAGGTGGCGACGTCCCTGAGACC AACTACCTCTTCATGGGGGACTTTGTGGACCGTGGCTTCTATAGCGTCGAAACGTTCCTC CTGCTGCTGGCACTTAAGGTTCGCTATCCTGATCGCATCACACTGATCCGGGGCAACCAT GAGAGTCGCCAGATCACGCAGGTCTATGGCTTCTACGATGAGTGCCTGCGCAAGTACGGC TCGGTGACTGTGGCGCTACTGCACTGAGATCTTTGACTACCTCAGCCTGTCAGCCATC CAGATTCGGACAATCGACCGAAAGCAAGAGGTGCCTCATGATGGGCCCATGTGTGACCTC CTCTGGTCTGACCCAGAAGACACCACAGGCTGGGGCGTGAGCCCCCGAGGAGCCGGCTAC CTATTTGGCAGTGACGTGGCCCAGTTCAACGCAGCCAATGACATTGACATGATCTGC CGTGCCCACCAACTGGTGATGGAAGGTTACAAGTGGCACTTCAATGAGACGGTGCTCACT GTGTGGTCGGCACCCAACTACTGCTACCGCTGTGGGAATGTGGCAGCCATCTTGGAGCTG GACGAGCATCTCCAGAAAGATTTCATCATCTTTGAGGCTGCTCCCCAAGAGACACGGGGC TCCAACCCTTCTGGCCCTCGCACCACTGTGACTCTGCCATCTTCCTCAGACGGAGGCTGG GCGTGGGGGGGCTGTCCTGCTCTGCTGTCCCCCAAGAGGGTGCTTCGAGGGTGAGGAC TTCTCTGGAGAGGCCTGGAGACCTAGCTCCATGTTCCTCCTCCTCTCTCCCCACTTGAAC

TAAAAAAAAAAAAAAAAAAAAAAAGAAAAAAAAAAAA

Restriction Sites: Please inquire



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ACCN: NM_002720

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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.

Metallophos, PP2Ac

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 002720.1</u>, <u>NP 002711.1</u>

 RefSeq Size:
 1429 bp

 RefSeq ORF:
 924 bp

 Locus ID:
 5531

 UniProt ID:
 P60510

Cytogenetics: 16p11.2

Domains:

Protein Families: Druggable Genome, Phosphatase

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. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase (By

similarity). 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.

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Both variants 1

and 2 encode the same isoform (1).