

Product datasheet for RC200538L4

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OriGene Technologies, Inc.

PPP4C (NM_002720) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PPP4C (NM 002720) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PPP4C

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

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200538).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_002720

ORF Size: 921 bp



PPP4C (NM_002720) Human Tagged Lenti ORF Clone - RC200538L4

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.

RefSeq: <u>NM 002720.1</u>

RefSeq Size: 1429 bp RefSeq ORF: 924 bp

Locus ID: 5531

 UniProt ID:
 P60510

 Cytogenetics:
 16p11.2

Domains: Metallophos, PP2Ac

Protein Families: Druggable Genome, Phosphatase

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

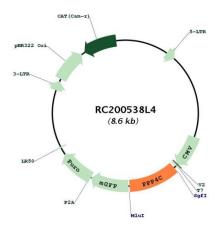
dephosphorylates H2AFX phosphorylated on Ser-140 (gamma-H2AFX) generated during DNA replication and required for DNA double strand break repair. Dephosphorylates NDEL1 at CDK1 phosphorylation sites and negatively regulates CDK1 activity in interphase (By

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.

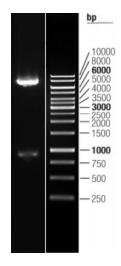
[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC200538L4



Double digestion of RC200538L4 using Sgfl and Mlul $\,$