

Product datasheet for RC203575L1

OriGene Technologies, Inc.

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PPP1A (PPP1CA) (NM 002708) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PPP1A (PPP1CA) (NM_002708) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: PPP1A

Synonyms: PP-1A; PP1A; PP1alpha; PPP1A

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203575).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_002708

ORF Size: 990 bp



PPP1A (PPP1CA) (NM_002708) Human Tagged Lenti ORF Clone - RC203575L1

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.

Druggable Genome, Phosphatase

RefSeq: <u>NM 002708.3</u>

 RefSeq Size:
 1488 bp

 RefSeq ORF:
 993 bp

 Locus ID:
 5499

 UniProt ID:
 P62136

Cytogenetics: 11q13.2

Domains: Metallophos, PP2Ac

Protein Pathways: Focal adhesion, Insulin signaling pathway, Long-term potentiation, Oocyte meiosis, Regulation

of actin cytoskeleton, Vascular smooth muscle contraction

MW: 37.5 kDa

Protein Families:

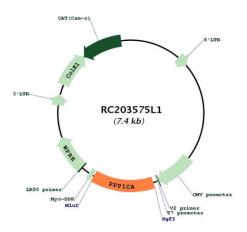
Gene Summary: The protein encoded by this gene is one of the three catalytic subunits of protein

phosphatase 1 (PP1). This broadly expressed gene encodes the alpha subunit of the PP1 complex that associates with over 200 regulatory proteins to form holoenzymes which dephosphorylate their biological targets with high specificity. PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Increased PP1 activity has been observed in the end stage of heart failure. Studies suggest that PP1 is an important regulator of cardiac function and that PP1 deregulation is implicated in diabetes and multiple types of cancer. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene.

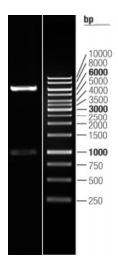
[provided by RefSeq, Jul 2020]



Product images:



Circular map for RC203575L1



Double digestion of RC203575L1 using Sgfl and Mlul