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## Product datasheet for RC203575L1

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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:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

ORF Nucleotide
Sequence:
Restriction Sites:
Cloning Scheme:

Myc-DDK
PPP1A
PP-1A; PP1A; PP1alpha; PPP1A
None
pLenti-C-Myc-DDK (PS100064)
Chloramphenicol ( $34 \mathrm{ug} / \mathrm{mL}$ )
The ORF insert of this clone is exactly the same as(RC203575).

Sgfl-Mlul

Cloning sites used for ORF Shuttling:


GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TAA ACGGCCGGCC

*The last codon before the Stop codon of the ORF.

## ACCN:

ORF Size:

NM_002708
990 bp

OTI Disclaimer:

OTI Annotation:

Components:

Reconstitution Method:

RefSeq:
RefSeq Size:
RefSeq ORF:
Locus ID:
UniProt ID:
Cytogenetics:
Domains:
Protein Families:
Protein Pathways:

MW:
Gene Summary:

1. Centrifuge at $5,000 \mathrm{xg}$ for 5 min .
2. Carefully open the tube and add 100 ul 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 5000 xg ) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.
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

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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).

NM 002708.3
1488 bp
993 bp
5499
P62136
11q13.2
Metallophos, PP2Ac
Druggable Genome, Phosphatase
Focal adhesion, Insulin signaling pathway, Long-term potentiation, Oocyte meiosis, Regulation of actin cytoskeleton, Vascular smooth muscle contraction

## 37.5 kDa

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

