

## Product datasheet for **RC203575L4V**

### PPP1A (PPP1CA) (NM\_002708) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	PPP1A (PPP1CA) (NM_002708) Human Tagged ORF Clone Lentiviral Particle
Symbol:	PPP1A
Synonyms:	PP-1A; PP1A; PP1alpha; PPP1A
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_002708
ORF Size:	990 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC203575).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_002708.3</a>
RefSeq Size:	1488 bp
RefSeq ORF:	993 bp
Locus ID:	5499
UniProt ID:	<a href="#">P62136</a>
Cytogenetics:	11q13.2
Domains:	Metallophos, PP2Ac
Protein Families:	Druggable Genome, Phosphatase



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**Protein Pathways:** Focal adhesion, Insulin signaling pathway, Long-term potentiation, Oocyte meiosis, Regulation of actin cytoskeleton, Vascular smooth muscle contraction

**MW:** 37.5 kDa

**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]