

## Product datasheet for **RC205715L2V**

### **RPA34 (RPA2) (NM\_002946) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	RPA34 (RPA2) (NM_002946) Human Tagged ORF Clone Lentiviral Particle
Symbol:	RPA34
Synonyms:	REPA2; RP-A p32; RP-A p34; RPA32
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_002946
ORF Size:	810 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC205715).
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_002946.3</a>
RefSeq Size:	1819 bp
RefSeq ORF:	813 bp
Locus ID:	6118
UniProt ID:	<a href="#">P15927</a>
Cytogenetics:	1p35.3
Domains:	tRNA_anti
Protein Families:	Druggable Genome, Stem cell - Pluripotency



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**Protein Pathways:** DNA replication, Homologous recombination, Mismatch repair, Nucleotide excision repair

**MW:** 29.2 kDa

**Gene Summary:** This gene encodes a subunit of the heterotrimeric Replication Protein A (RPA) complex, which binds to single-stranded DNA (ssDNA), forming a nucleoprotein complex that plays an important role in DNA metabolism, being involved in DNA replication, repair, recombination, telomere maintenance, and co-ordinating the cellular response to DNA damage through activation of the ataxia telangiectasia and Rad3-related protein (ATR) kinase. The RPA complex protects single-stranded DNA from nucleases, prevents formation of secondary structures that would interfere with repair, and co-ordinates the recruitment and departure of different genome maintenance factors. The heterotrimeric complex has two different modes of ssDNA binding, a low-affinity and high-affinity mode, determined by which oligonucleotide/oligosaccharide-binding (OB) domains of the complex are utilized, and differing in the length of DNA bound. This subunit contains a single OB domain that participates in high-affinity DNA binding and also contains a winged helix domain at its carboxy terminus, which interacts with many genome maintenance protein. Post-translational modifications of the RPA complex also plays a role in co-ordinating different damage response pathways. [provided by RefSeq, Sep 2017]