

Product datasheet for RC205715L2V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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

The ORF insert of this clone is exactly the same as(RC205715).

Sequence:

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

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.

RefSeg: NM 002946.3

 RefSeq Size:
 1819 bp

 RefSeq ORF:
 813 bp

 Locus ID:
 6118

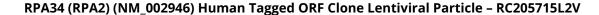
 UniProt ID:
 P15927

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]