

Product datasheet for RC202066L4V

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

RPA70 (RPA1) (NM_002945) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: RPA70 (RPA1) (NM_002945) Human Tagged ORF Clone Lentiviral Particle

Symbol: RPA70

Synonyms: HSSB; MST075; REPA1; RF-A; RP-A; RPA70

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_002945 **ORF Size:** 1848 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC202066).

Sequence:

Cytogenetics:

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.

RefSeg: NM 002945.2, NP 002936.1

 RefSeq Size:
 4345 bp

 RefSeq ORF:
 1851 bp

 Locus ID:
 6117

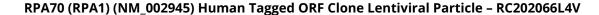
 UniProt ID:
 P27694

Domains: tRNA_anti, Rep-A_N

Protein Families: Druggable Genome, Stem cell - Pluripotency

17p13.3





ORIGENE

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

MW: 68.1 kDa

Gene Summary:

This gene encodes the largest 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 nucleoprotein complex protects the 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. This subunit contains four oligonucleotide/oligosaccharide-binding (OB) domains, though the majority of ssDNA binding occurs in two of these domains. The heterotrimeric complex has two different modes of ssDNA binding, a low-affinity and high-affinity mode, determined by which ssDNA binding domains are utilized. The different binding modes differ in the length of DNA bound and in the proteins with which it interacts, thereby playing a role in regulating different genomic maintenance pathways. [provided by RefSeq, Sep 2017]