

Product datasheet for TP305715L

OriGene Technologies, Inc.

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RPA34 (RPA2) (NM_002946) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human replication protein A2, 32kDa (RPA2), 1 mg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC205715 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MWNSGFESYGSSSYGGAGGYTQSPGGFGSPAPSQAEKKSRARAQHIVPCTISQLLSATLVDEVFRIGNVE ISQVTIVGIIRHAEKAPTNIVYKIDDMTAAPMDVRQWVDTDDTSSENTVVPPETYVKVAGHLRSFQNKKS LVAFKIMPLEDMNEFTTHILEVINAHMVLSKANSQPSAGRAPISNPGMSEAGNFGGNSFMPANGLTVAQN

QVLNLIKACPRPEGLNFQDLKNQLKHMSVSSIKQAVDFLSNEGHIYSTVDDDHFKSTDAE

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 29.1 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 002937

Locus ID: 6118 **UniProt ID:** P15927





RefSeq Size: 1819

Cytogenetics: 1p35.3 RefSeq ORF: 810

Synonyms: REPA2; RP-A p32; RP-A p34; RPA32

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

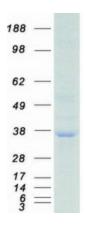
oligonucleotide/oligosaccharide-binding (OB) domains of the complex are utilized, and differing in the length of DNA bound. This subunit contains a single OB domain that participates in high-affinity DNA binding and also contains a winged helix domain at its carboxy terminus, which interacts with many genome maintenance protein. Post-translational modifications of the RPA complex also plays a role in co-ordinating different damage

response pathways. [provided by RefSeg, Sep 2017]

Protein Families: Druggable Genome, Stem cell - Pluripotency

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

Product images:



Coomassie blue staining of purified RPA2 protein (Cat# [TP305715]). The protein was produced from HEK293T cells transfected with RPA2 cDNA clone (Cat# [RC205715]) using MegaTran 2.0 (Cat# [TT210002]).