

Product datasheet for **AR09732PU-L**

RPA2 (1-270, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	RPA2 (1-270, His-tag) human recombinant protein, 0.25 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> <u>MGSMWNSGFE</u> SYGSSSYGGA GGYTQSPGGF GSPAPSQA EK KSRARAQHIV PCTISQLLSA TLVDEVFRIG NVEISQVTIV GIIRHAEKAP TNIVYKIDDM TAAPMDVRQW VDTDDTSEN TVVPETYVK VAGHLRSFQN KKS LVAFKIM PLEDMNEFTT HILEVINAHM VLSKANSQPS AGRAPISNPG MSEAGNFGGN SFMPANGLTV AQNQVLNLIK ACPRPEGLNF QDLKNQLKHM SVSSIKQAVD FLSNEGHIYS TVDDDHFKST DAE
Tag:	His-tag
Predicted MW:	31.7 kDa
Concentration:	lot specific
Purity:	>85%
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2 mM DTT, 0.1M NaCl
Preparation:	Liquid purified protein
Protein Description:	Recombinant human RPA2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_001273005</u>
Locus ID:	6118
UniProt ID:	<u>P15927</u>
Cytogenetics:	1p35.3
Synonyms:	REPA2, RFA2, RF-A protein 2, RPA32, RP-A p32, RPA34, RP-A p34, Replication protein A



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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]

Protein Families:

Druggable Genome, Stem cell - Pluripotency

Protein Pathways:

DNA replication, Homologous recombination, Mismatch repair, Nucleotide excision repair

Product images: