

## Replication protein A 32 kDa subunit (RPA2) Recombinant Protein | RPA2 recombinant protein

Recombinant Human Replication protein A 32 kDa subunit (RPA2), partial

|                              |                                                                 |
|------------------------------|-----------------------------------------------------------------|
| CATALOG #<br><b>AAA81609</b> | HOST<br><b>E Coli or Yeast or Baculovirus or Mammalian Cell</b> |
|------------------------------|-----------------------------------------------------------------|

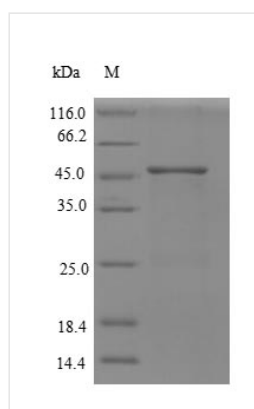
### PRODUCT SYNONYMS

Replication protein A 32 kDa subunit (RPA2); Recombinant Human Replication protein A 32 kDa subunit (RPA2); partial; Replication factor A protein 2; RF-A protein 2; Replication protein A 34 kDa subunit; RP-A p34; RPA2 recombinant protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | E Coli or Yeast or Baculovirus or Mammalian Cell                                                                                                                                                                                                                                                               |
| Purity/Purification     | Greater or equal to 85% purity as determined by SDS-PAGE.                                                                                                                                                                                                                                                      |
| Form/Format             | Lyophilized or liquid (Format to be determined during the manufacturing process)                                                                                                                                                                                                                               |
| Sequence Positions      | 1-267aa; Partial                                                                                                                                                                                                                                                                                               |
| Sequence                | MWNSGFESYG SSSYGGAGGY TQSPGGFGSP APSQAEKKSR ARAQHVPCT ISQLLSATLV DEVFRIGNVE<br>ISQVTIVGII RHA EKAPTNI VYKIDDMTAA PMDVRQWVD TDTSSSENTVV PPETYVKVAG HLRSFQNKKS<br>LVAFKIMPLE DMNEFTTHIL EVINAHMVLS KANSQPSAGR APISNPGMSE AGNFGGNSFM PANGLTVAQN<br>QVLNLIKACP RPEGLNFQDL KNQLKHMSVS SIKQAVDFLS NEGHIYSTVD DDHFKST |
| Preparation and Storage | Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.                                                                                                            |

### IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

|                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for RPA2 recombinant protein | As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds and stabilizes single-stranded DNA intermediates, that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different proteins and complexes involved in DNA metabolism. Thereby, it plays an essential role both in DNA replication and the cellular response to DNA damage. In the cellular response to DNA damage, the RPA complex controls DNA repair and DNA damage checkpoint activation. Through recruitment of ATRIP activates the ATR kinase a master regulator of the DNA damage response. It is required for the recruitment of the DNA double-strand break repair factors RAD51 and RAD52 to chromatin in response to DNA damage. Also recruits to sites of DNA damage proteins like XPA and XPG that are involved in nucleotide excision repair and is required for this mechanism of DNA repair. Plays also a role in base excision repair (BER) probably through interaction with UNG. Through RFW3 may activate CHEK1 and play a role in replication checkpoint control. Also recruits SMARCA1/HARP, which is involved in replication fork restart, to sites of DNA damage. May also play a role in telomere maintenance |
| Product Categories/Family for RPA2 recombinant protein   | <a href="#">Epigenetics and Nuclear Signaling</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## References

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NCBI AND UNIPROT INFORMATION

|                                  |                                                         |
|----------------------------------|---------------------------------------------------------|
| NCBI GI #                        | 554595586                                               |
| NCBI GeneID                      | 6118                                                    |
| NCBI Accession #                 | NP_001273005.1                                          |
| NCBI GenBank Nucleotide #        | NM_001286076.1                                          |
| UniProt Accession #              | P15927; Q52II0; Q5TEI9; Q5TEJ5                          |
| Molecular Weight                 | 55.9 kDa                                                |
| NCBI Official Full Name          | replication protein A 32 kDa subunit isoform 2          |
| NCBI Official Synonym Full Names | replication protein A2                                  |
| NCBI Official Symbol             | RPA2                                                    |
| NCBI Official Synonym Symbols    | REPA2; RPA32; RP-A p32; RP-A p34                        |
| NCBI Protein Information         | replication protein A 32 kDa subunit                    |
| UniProt Protein Name             | Replication protein A 32 kDa subunit                    |
| UniProt Gene Name                | <b>RPA2</b>                                             |
| UniProt Synonym Gene Names       | REPA2; RPA32; RPA34; RP-A p32; RF-A protein 2; RP-A p34 |
| UniProt Entry Name               | RFA2_HUMAN                                              |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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