

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                           |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human RPA2 when phosphorylated at T21.                                  |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Rabbit IgG                                                           |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                       |
| <b>Immunogen</b>                                                                                                                                                                                        | Phosphopeptide containing the human RPA2 T21 site<br>Accession # P15927         |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                    |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                 |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

RPA2 (replication protein A 32 kDa subunit; also RFA2 and RPA p34) is a 32 kDa DNA-binding protein that constitutes one of three subunits comprising the PRA heterotrimer complex. In conjunction with 70 kDa RPA1 and 14 kDa RPA3, RPA2 participates in DNA replication, recombination and repair. Human RPA2 is 270 amino acids (aa) in length. It contains a Gly/Ser-rich N-terminus (aa 1-33), a DNA-binding domain (aa 43-171) and a protein-interaction C-terminus (aa 187-270). Phosphorylation of the N-terminus on Ser4/8/23/29/33, plus Thr21, regulates RPA complex interactions with DNA repair and replication complexes. There are multiple splice variants. Three contain N-terminal extensions: one shows an 88 aa insertion after Ser4, another shows a 12 aa substitution for aa 1-4, and a third shows a four aa insertion after Ser4. There is also a deletion of aa 93-98, and a potential truncation after Gln175. Over aa 141-270, human RPA2 shares 83% aa identity with mouse RPA2.

## PRODUCT SPECIFIC NOTICES

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