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# Product datasheet for TA591019

## RPA34 (RPA2) Rabbit Monoclonal Antibody [Clone ID: OTIR2G2]

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Clone Name:** | OTIR2G2 |
| **Applications:** | SISCAPA |
| **Reactivity:** | Human, Mouse, Rat |
| **Host:** | Rabbit |
| **Isotype:** | IgG |
| **Clonality:** | Monoclonal |
| **Immunogen:** | Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human RPA2 (NP_002937). The exact sequence is proprietary. |
| **Formulation:** | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide. |
| **Concentration:** | Lot dependent; please refer to CoA along with shipment |
| **Purification:** | Purified from cell culture supernatant by affinity chromatography (protein A/G) |
| **Conjugation:** | Unconjugated |
| **Storage:** | Store at -20°C as received. |
| **Stability:** | Stable for 12 months from date of receipt. |
| **Predicted Protein Size:** | 32 kDa |
| **Gene Name:** | replication protein A2 |
| **Database Link:** | NP_002937<br>Entrez Gene 19891 MouseEntrez Gene 59102 RatEntrez Gene 6118 Human<br>P15927 |

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**Background:** 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]

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

**Protein Families:** Druggable Genome, Stem cell - Pluripotency

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