A Reliable Research Partner in Life Science and Medicine

# **RPA1 Polyclonal Antibody**

catalog number: E-AB-64035

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### Description

Reactivity Human

**Immunogen** Recombinant fusion protein of human RPA1 (NP\_002936.1).

Host Rabbit
Isotype IgG

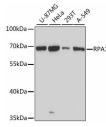
**Purification** Affinity purification

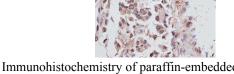
**Buffer** Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.

# **Applications** Recommended Dilution

**WB** 1:500-1:2000 **IHC** 1:50-1:100

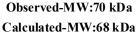
## Data

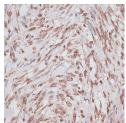




Western blot analysis of extracts of various cell lines using RPA1 Polyclonal Antibody at dilution of 1:3000.

Immunohistochemistry of paraffin-embedded Human lung cancer using RPA1 Polyclonal Antibody at dilution of 1:100 (40x lens).





Immunohistochemistry of paraffin-embedded Human uterus using RPA1 Polyclonal Antibody at dilution of 1:100 (40x lens).

## Preparation & Storage

Storage Storage Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

**Shipping** The product is shipped with ice pack, upon receipt, store it immediately at the

temperature recommended.

# Background

## For Research Use Only

# **Elabscience Bionovation Inc.**



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This gene encodes the largest 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 nucleoprotein complex protects the 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. This subunit contains four oligonucleotide/oligosaccharide-binding (OB) domains, though the majority of ssDNA binding occurs in two of these domains. The heterotrimeric complex has two different modes of ssDNA binding, a low-affinity and high-affinity mode, determined by which ssDNA binding domains are utilized. The different binding modes differ in the length of DNA bound and in the proteins with which it interacts, thereby playing a role in regulating different genomic maintenance pathways.

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