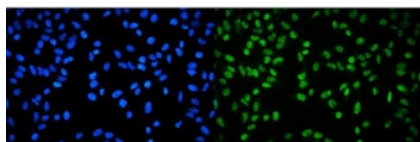


## RPA32 Antibody / RPA2 (RQ5919)

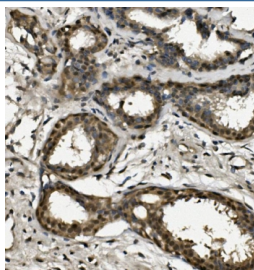
Catalog No.	Formulation	Size
RQ5919	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

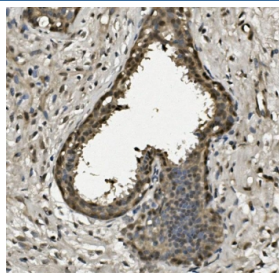
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
<b>UniProt</b>	P15927
<b>Applications</b>	Western Blot : 0.5-1ug/ml Immunohistochemistry : 1-2ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This RPA32 antibody is available for research use only.



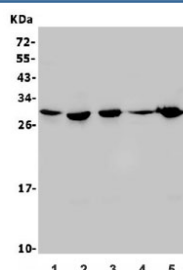
Immunofluorescent staining of FFPE human HeLa cells with RPA32 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



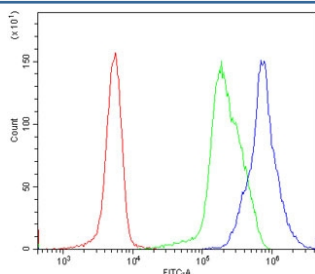
IHC staining of FFPE human breast cancer with RPA32 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human breast cancer with RPA32 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) U-2 OS, 2) Jurkat, 3) K562, 4) A549 and 5) Raji lysate with RPA32 antibody. Expected molecular weight ~32 kDa.



Flow cytometry testing of human U937 cells with RPA32 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RPA32 antibody.

## Description

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.

## Application Notes

Optimal dilution of the RPA32 antibody should be determined by the researcher.

## Immunogen

Recombinant human protein (amino acids Q34-H254) was used as the immunogen for the RPA32 antibody.

## Storage

After reconstitution, the RPA32 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

