

# Phospho-RPA2-Ser33 Rabbit mAb

Catalog No.: AP1479 **Recombinant**

## Basic Information

**Observed MW**

32kDa

**Calculated MW**

29kDa

**Category**

Primary antibody

**Applications**

WB,IHC-P,ELISA

**Cross-Reactivity**

Mouse, Rat

**CloneNo number**

ARC66738

## 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.

## Recommended Dilutions

**WB** 1:500 - 1:1000**IHC-P** 1:500 - 1:1000**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

**Gene ID**

6118

**Swiss Prot**

P15927

**Immunogen**

A synthetic phosphorylated peptide around Ser33 of human RPA2 (NP\_002937.1).

**Synonyms**

REPA2; RPA32; RP-A p32; RP-A p34

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

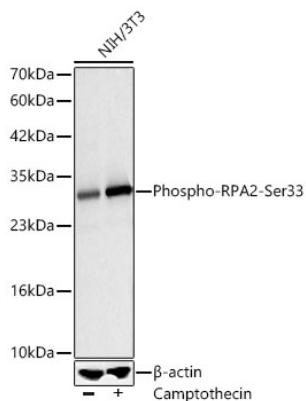
Affinity purification

**Storage**

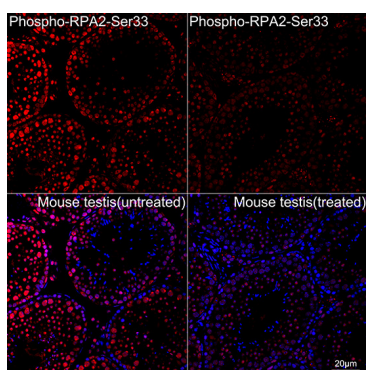
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

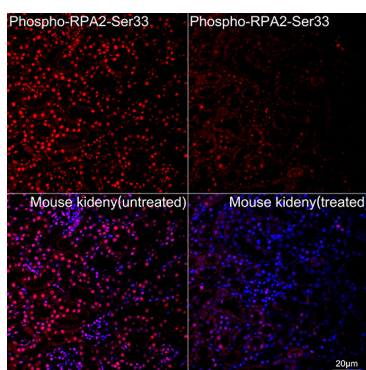
## Validation Data



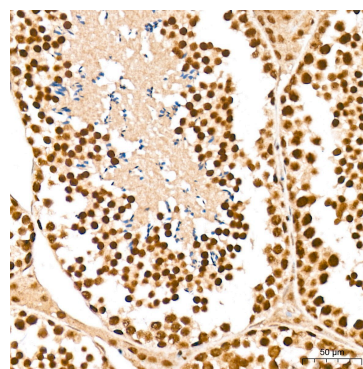
Western blot analysis of lysates from NIH/3T3 cells using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at 1:1000 dilution. NIH/3T3 cells were treated by Camptothecin (1  $\mu$ M) at 37°C for 1 hour. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 30  $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.



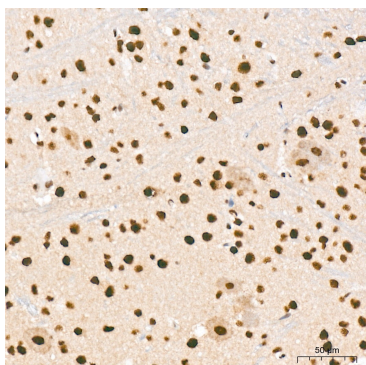
Confocal imaging of paraffin-embedded Mouse testis and Mouse testis treated with  $\lambda$ pp tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



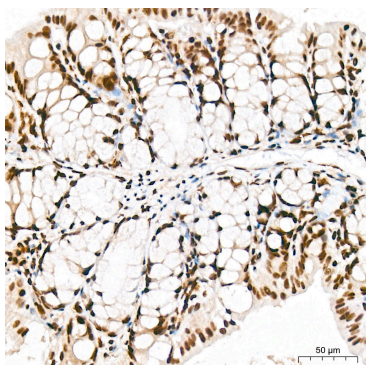
Confocal imaging of paraffin-embedded Mouse kidney and Mouse kidney treated with  $\lambda$ pp tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



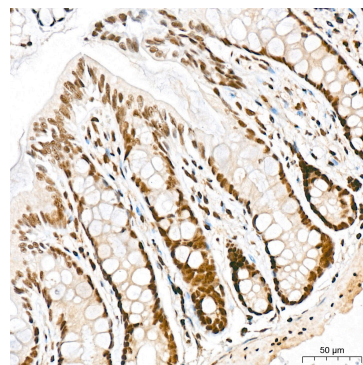
Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at a dilution of 1:800 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at a dilution of 1:800 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



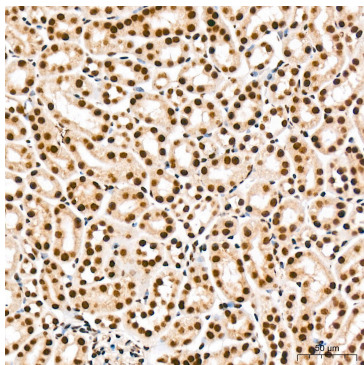
Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at a dilution of 1:800 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at a dilution of 1:800 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

## Validation Data

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Immunohistochemistry analysis of paraffin-embedded Mouse kidney tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at a dilution of 1:800 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.