# Phospho-RPA2-Ser33 Rabbit mAb

Catalog No.: AP1479 Recombinant



# **Basic Information**

## **Observed MW**

32kDa/36kDa

#### **Calculated MW**

29kDa

## Category

Primary antibody

## **Applications**

WB,IHC-P,IF/ICC,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

**IF/ICC** 1:50-1:200

**ELISA** Recommended starting

concentration is 1 µg/mL.

Please optimize the
concentration based on
your specific assay
requirements.

## Immunogen Information

**Gene ID Swiss Prot**6118
P15927

#### **Immunogen**

Synthetic peptide. This information is considered to be commercially sensitive.

## **Synonyms**

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

## **Contact**

<b>a</b>		400-999-6126
$\bowtie$		cn.market@abclonal.com.cn
•	ī	www.abclonal.com.cn

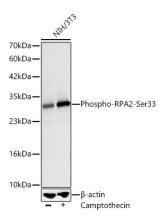
## **Product Information**

SourceIsotypePurificationRabbitIgGAffinity purification

#### Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

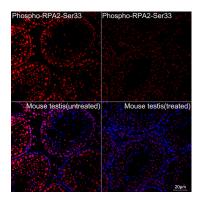


Western blot analysis of lysates from NIH/3T3 cells using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at 1:1000 dilution. NIH/3T3 cells were treated with Camptothecin (1  $\mu$ M) at 37°C for 1 hour. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 30  $\mu$ g per lane.

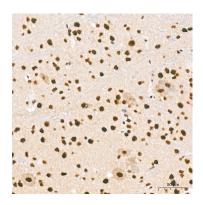
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

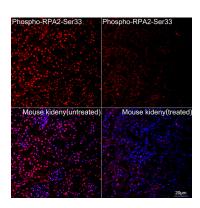
Exposure time: 10s.



Confocal imaging of paraffin-embedded Mouse testis and Mouse testis treated with App 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.



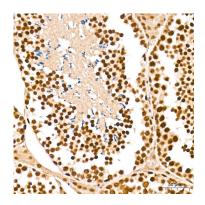
Immunohistochemistry analysis of paraffinembedded Mouse brain tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at a dilution of 1:800 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Confocal imaging of paraffin-embedded Mouse kidney and Mouse kidney treated with App 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 paraffinembedded 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.

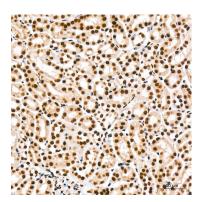


Immunohistochemistry analysis of paraffinembedded Mouse testis tissue using Phospho-RPA2-Ser33 Rabbit mAb (AP1479) at a dilution of 1:800 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded 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**



Immunohistochemistry analysis of paraffinembedded 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.