RPA32/RPA2 Rabbit mAb

Catalog No.: A26498 Recombinant



Basic Information

Observed MW

32kDa

Calculated MW

29kDa

Category

Primary antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC69940

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 1:2000 - 1:6000

IHC-P 1:1000 - 1:5000

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 Prot6118
P15927

Immunogen

Recombinant Protein corresponding to a sequence within amino acids 1-270 of human RPA32/RPA2 (NP_002937.1).

Synonyms

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

Contact

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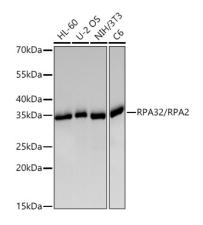
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

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

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.



Western blot analysis of various lysates using RPA32/RPA2 Rabbit mAb (A26498) at 1:5000 dilution incubated overnight at 4° C.

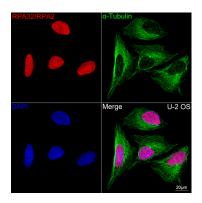
 $Secondary\ antibody:\ HRP-conjugated\ Goat\ anti-Rabbit\ IgG\ (H+L)\ (AS014)\ at\ 1:10000\ dilution.$

Lysates/proteins: 25 µg per lane.

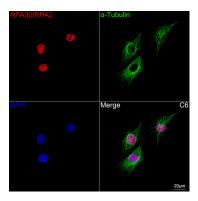
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

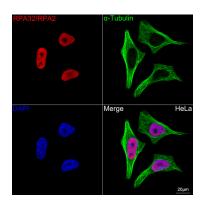
Exposure time: 20s.



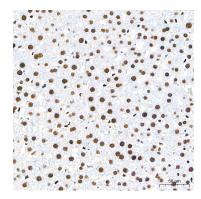
Confocal imaging of U-2 OS cells using RPA32/RPA2 Rabbit mAb (A26498, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



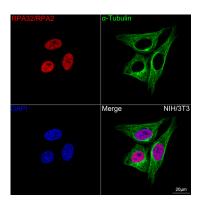
Confocal imaging of C6 cells using RPA32/RPA2 Rabbit mAb (A26498, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution



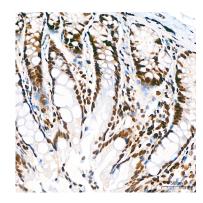
Confocal imaging of HeLa cells using RPA32/RPA2 Rabbit mAb (A26498, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffinembedded Rat liver tissue using RPA32/RPA2 Rabbit mAb (A26498) at a dilution of 1:1600 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IHC staining.



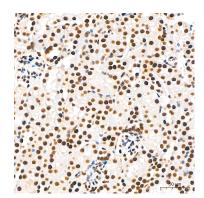
Confocal imaging of NIH/3T3 cells using RPA32/RPA2 Rabbit mAb (A26498, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffinembedded Rat colon tissue using RPA32/RPA2 Rabbit mAb (A26498) at a dilution of 1:1600 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IHC staining.

Validation Data

1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffinembedded Mouse kidney tissue using RPA32/RPA2 Rabbit mAb (A26498) at a dilution of 1:1600 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Human esophagus tissue using RPA32/RPA2 Rabbit mAb (A26498) at a dilution of 1:1600 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Human colon tissue using RPA32/RPA2 Rabbit mAb (A26498) at a dilution of 1:1600 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IHC staining.