

Catalog No.: A2189 9 Publications





Basic Information

Observed MW 32kDa

Calculated MW 29kDa

Category **Polyclonal Antibody**

Applications WB,IHC-P,IF/ICC,IP,ELISA

Cross-Reactivity Human, Mouse, Rat

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 - 1:2000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200
IP	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
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		
Recombinant fusion protein containing a sequence corresponding to amino acids		
80-270 of human RPA2 (NP_002937.1).		

Svnonvms

REPA2; RPA32; RP-A p32; RP-A p34; RPA2

Product Information

Source Rabbit

Isotype IgG

Purification Affinity purification

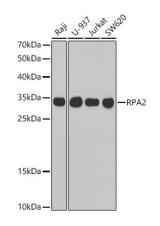
Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

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Contact

Validation Data



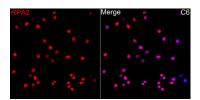
Western blot analysis of various lysates using RPA2 Rabbit pAb (A2189) at 1:1000 dilution.

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

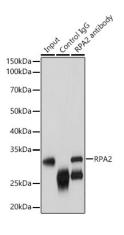
Lysates / proteins: 25 µg per lane.

Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.



Immunofluorescence analysis of C6 cells using RPA2 Rabbit pAb (A2189) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 200ug extracts of NIH/3T3 cells using 3ug RPA2 Rabbit pAb antibody (A2189 1:100). Western blot was performed from the immunoprecipitate using RPA2 Rabbit pAb antibody (A2189) at a dilition of 1:1000.