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Phospho-RPA2-T21 Rabbit mAb

Catalog No.: AP1040 Recombinant 2 Publications

Basic Information

Observed MW

32kDa/36kDa

Calculated MW

29kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB, ELISA

Cross-Reactivity

Human, Rat

CloneNo number

ARC1586

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

ELISA

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene IDSwiss Prot
6118
P15927

Immunogen

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

Synonyms

REPA2; RPA32; RP-A p32; RP-A p34; Phospho-RPA2-T21

Contact

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Product Information

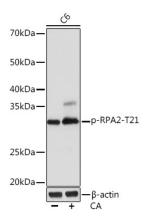
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

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

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of lysates from C6 cells, using Phospho-RPA2-T21 Rabbit mAb (AP1040) at 1:1000 dilution. C6 cells were treated with Calyculin A (100 nM) at 37°C for 30 minutes after serum-starvation overnight.

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

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% BSA.

Detection: ECL Basic Kit (RM00020).

Exposure time: 10s.