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RPA2 Antibody (N-term))

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9115a

Specification

RPA2 Antibody (N-term)) - Product Information

Application	**WB,E**
Primary Accession	P15927
Other Accession	Q63528, Q62193
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**29247**
Antigen Region	**66-96**

RPA2 Antibody (N-term)) - Additional Information

Gene ID 6118

Other Names
Replication protein A 32 kDa subunit, RP-A p32, Replication factor A protein 2, RF-A protein 2, Replication protein A 34 kDa subunit, RP-A p34, RPA2, REPA2, RPA32, RPA34

Target/Specificity
This RPA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-96 amino acids from the N-terminal region of human RPA2.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
RPA2 Antibody (N-term)) is for research use only and not for use in diagnostic or therapeutic procedures.

RPA2 Antibody (N-term)) - Protein Information

Name RPA2

Synonyms REPA2, RPA32, RPA34

Function As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds and stabilizes single-stranded DNA intermediates, that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different proteins and complexes involved in DNA metabolism. Thereby, it plays an essential role both in DNA replication and the cellular response to DNA damage. In the cellular response to DNA damage, the RPA complex controls DNA repair and DNA damage checkpoint activation. Through recruitment of ATRIP activates the ATR kinase a master regulator of the DNA damage response. It is required for the recruitment of the DNA double-strand break repair factors RAD51 and RAD52 to chromatin in response to DNA damage. Also recruits to sites of DNA damage proteins like XPA and XPG that are involved in nucleotide excision repair and is required for this mechanism of DNA repair. Also plays a role in base excision repair (BER) probably through interaction with UNG. Also recruits SMARCAL1/HARP, which is involved in replication fork restart, to sites of DNA damage. May also play a role in telomere maintenance.

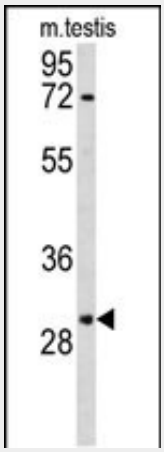
Cellular Location
Nucleus. Nucleus, PML body. Note=Redistributes to discrete nuclear foci upon DNA damage in an ATR-dependent manner

RPA2 Antibody (N-term)) - Protocols

Provided below are standard protocols that you may find useful for product applications.

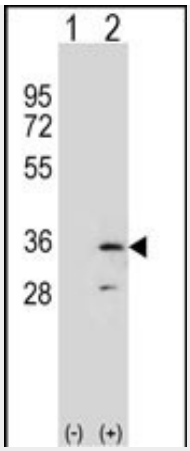
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RPA2 Antibody (N-term)) - Images



Western blot analysis of RPA2 Antibody (N-term) (Cat. #AP9115a) in mouse testis tissue lysates (35ug/lane). RPA2 (arrow) was detected using the purified Pab.

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Western blot analysis of RPA2 (arrow) using rabbit polyclonal RPA2 Antibody (N-term) (Cat. #AP9115a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RPA2 gene.

RPA2 Antibody (N-term)) - Background

RPA2 is required for DNA recombination, repair and replication. The activity of RP-A is mediated by single-stranded DNA binding and protein interactions.

RPA2 Antibody (N-term)) - References

Umbricht,C.B., et.al., J. Biol. Chem. 268 (9), 6131-6138 (1993)
Oakley,G.G., et.al., Biochemistry 48 (31), 7473-7481 (2009)