

RPA32 Rabbit mAb

Catalog # AP76032

Specification

RPA32 Rabbit mAb - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW

WB, IHC <u>P15927</u> Human, Rat Rabbit Monoclonal Antibody 29247

RPA32 Rabbit mAb - Additional Information

Gene ID 6118

Other Names RPA2

Dilution WB~~1/500-1/1000 IHC~~1/50-1/100

Format Liquid

RPA32 Rabbit mAb - 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. RPA stimulates 5'-3' helicase activity of BRIP1/FANCJ (PubMed:http://www.uniprot.org/citations/17596542



Cellular Location

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

RPA32 Rabbit mAb - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RPA32 Rabbit mAb - Images





