

RFA2 Antibody

Rabbit mAb Catalog # AP92103

Specification

RFA2 Antibody - Product Information

ApplicationWB, IHC, IPPrimary AccessionP15927ReactivityRatClonalityMonoclonalOther NamesP32; p34; REPA2; Replication factor A protein 2; RFA2; RFA; RP-A p32; RP-A p34; RP21C; RPA;Rpa2; RPA32; RPA34; RpLP1; RpP2;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	29247 Da

RFA2 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RFA2
Description	Required for DNA recombination, repair and replication. The activity of RP-A is mediated by single-stranded DNA binding and protein interactions.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

RFA2 Antibody - 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:17596542).

Cellular Location

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

RFA2 Antibody - 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
- <u>Cell Culture</u>

RFA2 Antibody - Images



Western blot analysis of RFA2 expression in HeLa cell lysate.