

Anti-Phospho-RPA2 (T21) Rabbit Monoclonal Antibody

Catalog # ABO13116

Product Information

Application	WB, IP
Primary Accession	P15927
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Phospho-RPA2 (T21) Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

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
Calculated MW	29247
Application Details	WB 1:5000-1:10000 IP 1:20
Subcellular Localization	Nucleus. Nucleus, PML body. Redistributes to discrete nuclear foci upon DNA damage in an ATR-dependent manner..
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: FCG-18
Immunogen	A synthesized peptide derived from human Phospho-RPA2 (T21)
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	RPA2
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Synonyms

REPA2, RPA32, RPA34

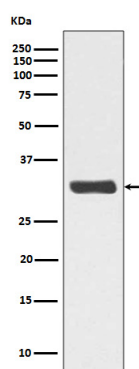
Function

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/FANCI (PubMed:[17596542](#)).

Cellular Location

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

Images



Western blot analysis of Phospho-RPA2 (T21) expression in HeLa cell lysate treated with Calyculin A.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.