

Anti-RPA2 Antibody

Catalog # AP96040

Product Information

Application	WB, IHC, FC
Primary Accession	P15927
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	29247

Additional Information

Gene ID	6118
Other Names	REPA2; RPA32; RPA34; ReplIC, ation protein A 32 kDa subunit; RP-A p32; ReplIC, ation factor A protein 2; RF-A protein 2; ReplIC, ation protein A 34 kDa subunit; RP-A p34
Target/Specificity	Recombinant fusion protein of human RPA2 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200)
Format	Mouse IgG1,k. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

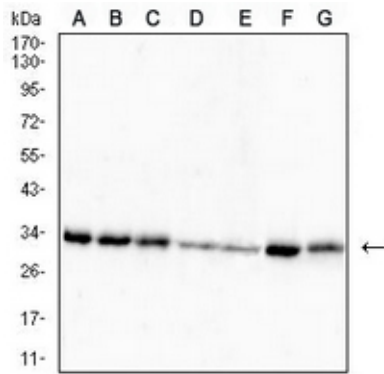
Name	RPA2
Synonyms	REPA2, RPA32, RPA34
Function	As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds and stabilizes single-stranded DNA intermediates that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different 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/FANCD1 (PubMed:[17596542](#)).

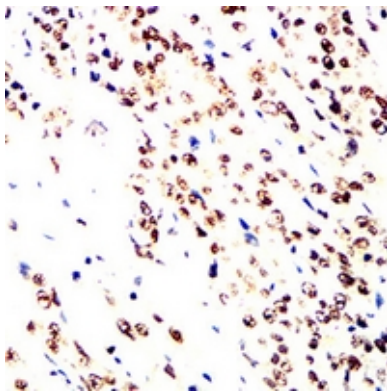
Cellular Location

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

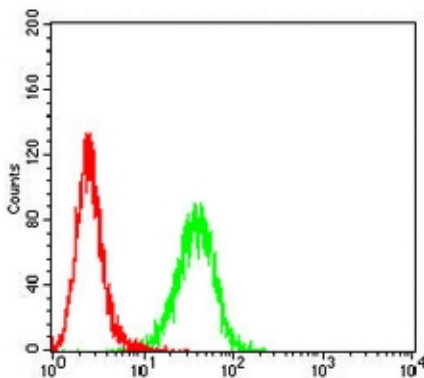
Images



Western blot analysis of RPA2 expression in HeLa (A), MCF7 (B), T47D (C), Ramos (D), HEK293 (E), HepG2 (F), A431 (G) whole cell lysates. (Predicted band size: 29 kD; Observed band size: 32 kD)



Immunohistochemical analysis of RPA2 staining in human liver formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of HeLa cells using Anti-RPA2 Antibody (green) and negative control (red).

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