

## RPA32 Rabbit mAb

Catalog # AP76031

### **Product Information**

**Application** WB, IHC-P, IP **Primary Accession** P15927

**Reactivity** Human, Mouse, Rat, Hamster

**Host** Rabbit

**Clonality** Monoclonal Antibody

Calculated MW 29247

## **Additional Information**

**Gene ID** 6118

Other Names RPA2

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IP~~1/20

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

#### **Protein Information**

Name RPA2

**Synonyms** REPA2, RPA32, RPA34

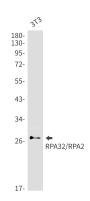
**Function** As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds

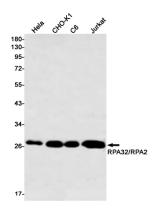
and stabilizes single-stranded DNA intermediates that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different proteins and complexes involved in DNA metabolism. Thereby, it plays an essential role both in DNA replication and the 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

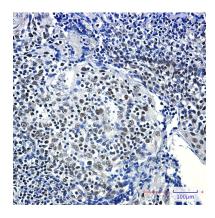
BRIP1/FANCJ (PubMed: <u>17596542</u>).

**Cellular Location** Nucleus. Nucleus, PML body. Note=Redistributes to discrete nuclear foci upon

# **Images**







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