

Product datasheet for **TA381019**

RPA34 (RPA2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB,1:500 - 1:2000
Reactivity:	Human, Mouse, Rat
Modifications:	Phospho S4/S8
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A phospho specific peptide corresponding to residues surrounding S4/S8 of human RPA2.
Formulation:	PBS with 0.05% proclin300,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	29kDa/30kDa/38kDa
Gene Name:	replication protein A2
Database Link:	Entrez Gene 6118 Human P15927



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Background:

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. Plays also 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.

Synonyms:

REPA2; RPA32; RPA34