

Product datasheet for **TA385176**

RPA34 (RPA2) Rabbit Monoclonal Antibody [Clone ID: R02-8A3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R02-8A3
Applications:	IHC, WB
Recommended Dilution:	WB: 1/1000-1/5000 IHC: 1/50-1/500
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human RPA32/RPA2
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 29 kDa; Observed MW: 29 kDa
Gene Name:	replication protein A2
Database Link:	Entrez Gene 6118 Human P15927



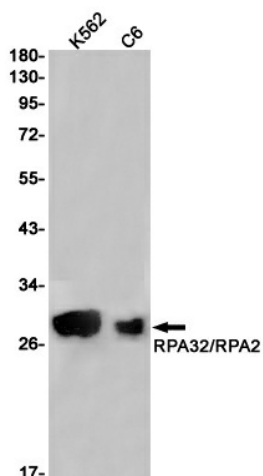
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Background:

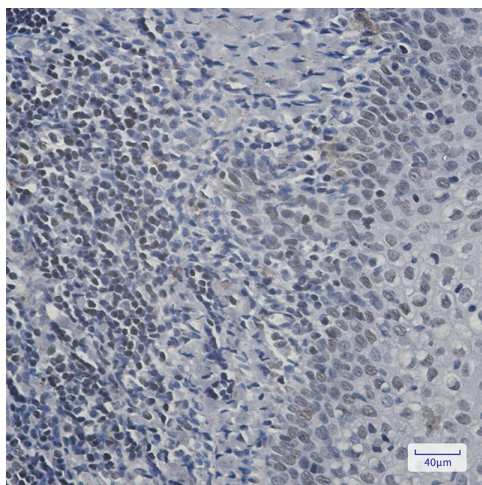
Swiss-Prot Acc.P15927.As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds and stabilizes single-stranded DNA intermediates, that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different proteins and complexes 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

Product images:

Western blot analysis of RPA32/RPA2 in K562, C6 lysates using RPA32 antibody.



Immunohistochemistry analysis of paraffin-embedded Human tonsil using RPA32/RPA2 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.