

Anti-Phospho-RPA2 (T21) Rabbit Monoclonal Antibody

Catalog # ABO13116

Specification

Anti-Phospho-RPA2 (T21) Rabbit Monoclonal Antibody - 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.

Anti-Phospho-RPA2 (T21) Rabbit Monoclonal Antibody - 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, RPA34

Calculated MW

29247 MW KDa

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..

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.

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.



Anti-Phospho-RPA2 (T21) Rabbit Monoclonal Antibody - 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:http://www.uniprot.org/citations/17596542" target="_blank">https://www.uniprot.org/citations/17596542" target="_blank">https://www.uniprot.org/citations/17596

Cellular Location

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

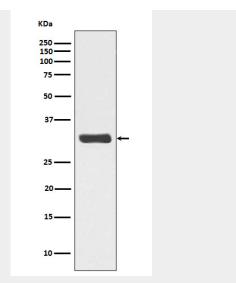
Anti-Phospho-RPA2 (T21) Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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