

Product datasheet

Anti-RPA32/RPA2 antibody [EPR2877Y] ab76420

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [24 References](#) [15 Images](#)

Overview

Product name	Anti-RPA32/RPA2 antibody [EPR2877Y]
Description	Rabbit monoclonal [EPR2877Y] to RPA32/RPA2
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human RPA32/RPA2 (C terminal). The exact sequence is proprietary.
Positive control	IHC-P: Human breast carcinoma tissue, mouse and rat liver Tissue WB: HeLa whole cell lysate (ab150035), HUVEC lysate, NIH3T3 cell lysate, C6 cell lysate ICC/IF: C6, HeLa, NIH/3T3 cells. Flow Cyt (intra): C6, HeLa, NIH/3T3 cells. IP: HeLa cell lysate
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2877Y

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab76420 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		1/1000. Detects a band of approximately 29 kDa (predicted molecular weight: 29 kDa). For unpurified format use at 1/5000 - 1/10000.
IP		1/20. For unpurified format use at 1/40.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
ICC/IF	★★★★★ (1)	1/50.

Target

Function

Required for DNA recombination, repair and replication. The activity of RP-A is mediated by single-stranded DNA binding and protein interactions.

Functions as component of the alternative replication protein A complex (aRPA). aRPA binds single-stranded DNA and probably plays a role in DNA repair; it does not support chromosomal DNA replication and cell cycle progression through S-phase. In vitro, aRPA cannot promote efficient priming by DNA polymerase alpha but supports DNA polymerase delta synthesis in the presence of PCNA and replication factor C (RFC), the dual incision/excision reaction of nucleotide excision repair and RAD51-dependent strand exchange.

Post-translational modifications

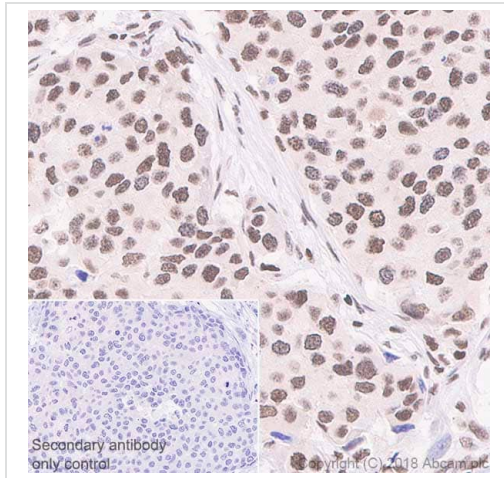
Phosphorylated in a cell-cycle-dependent manner (from the S phase until mitosis).

Phosphorylated by ATR upon DNA damage, which promotes its translocation to nuclear foci. Can be phosphorylated in vitro by PRKDC/DNA-PK in the presence of Ku and DNA, and by CDK1.

Cellular localization

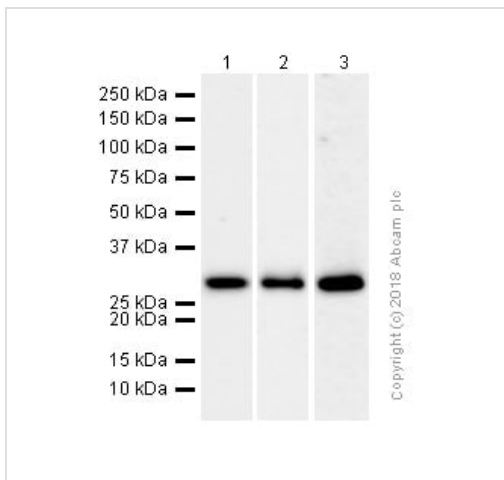
Nucleus. Nucleus > PML body. Also present in PML nuclear bodies. Redistributes to discrete nuclear foci upon DNA damage.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast cancer tissue sections labeling RPA32/RPA2 with purified ab76420 at 1/100 dilution (1 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

All lanes : Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420) at 1/1000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : C6 (Rat glial tumor glial cell) whole cell lysates

Lane 3 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

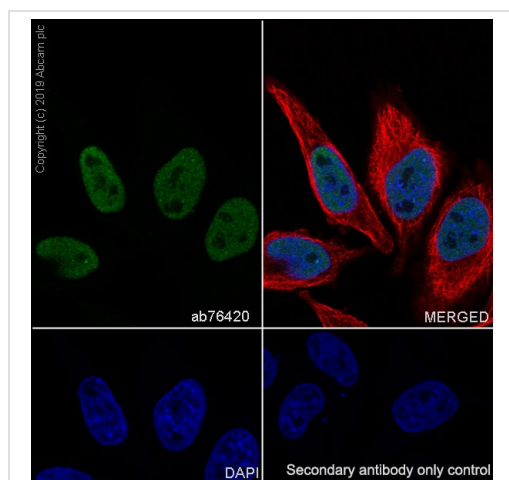
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

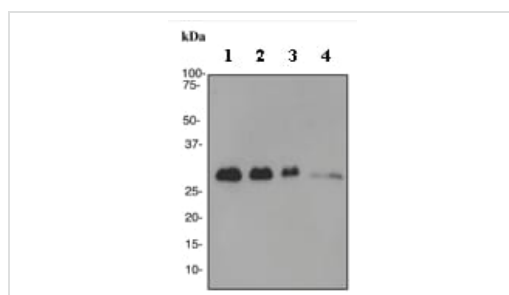
Predicted band size: 29 kDa

Observed band size: 29 kDa



Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1/50 dilution (2.0 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

All lanes : Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420) at 1/10000 dilution (unpurified)

Lane 1 : HeLa cell lysate

Lane 2 : HUVEC lysate

Lane 3 : NIH 3T3 cell lysate

Lane 4 : C6 cell lysate

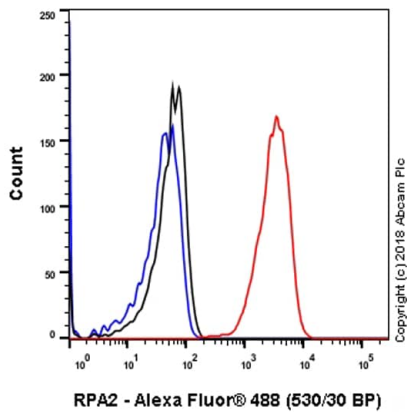
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/1000 dilution

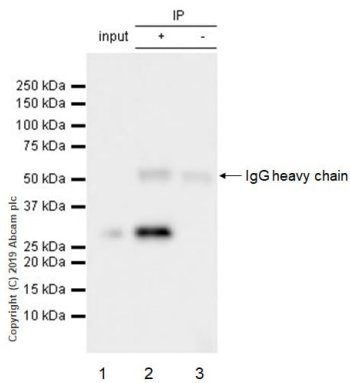
Predicted band size: 29 kDa

Observed band size: 29 kDa



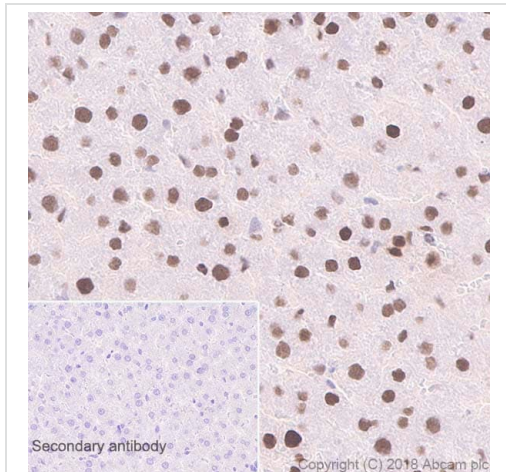
Flow Cytometry (Intracellular) - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Intracellular Flow Cytometry analysis of C6 (rat glial tumor glial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1/200 dilution (0.58 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (**ab172730**) - Black. Unlabeled control - Blue. Untreated cells - Green



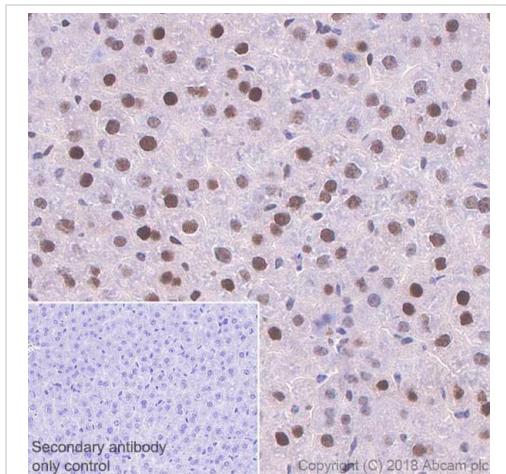
Immunoprecipitation - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

ab76420 (purified) at 1/20 dilution (0.5ug) immunoprecipitating RPA32/RPA2 in HeLa whole cell lysate. HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10ug
Lane 2 (+): ab76420 & HeLa whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab76420 in HeLa whole cell lysate
For western blotting, VeriBlot for IP secondary antibody (HRP) (**ab131366**) was at 1/1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.



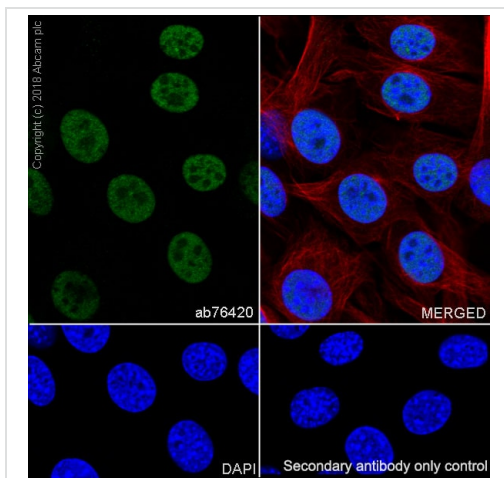
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat liver tissue sections labeling RPA32/RPA2 with purified ab76420 at 1/100 dilution (1 µg/ml). Heat mediated antigen retrieval was performed [ab93684](#) (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



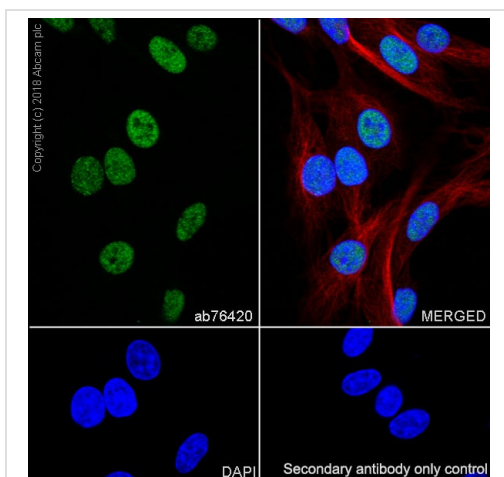
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse liver tissue sections labeling RPA32/RPA2 with purified ab76420 at 1/100 dilution (1 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



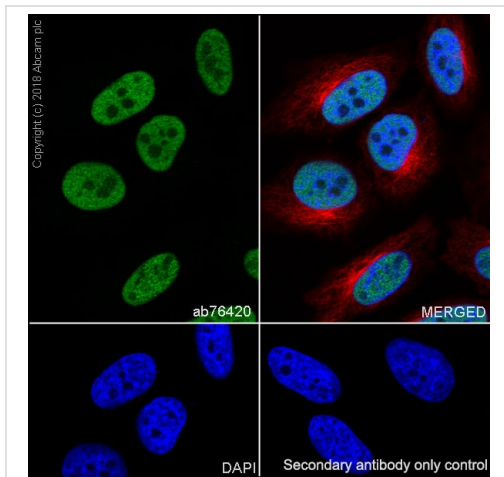
Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunocytochemistry/ Immunofluorescence analysis of C6 (rat glial tumor glial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1:50 (2.28 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



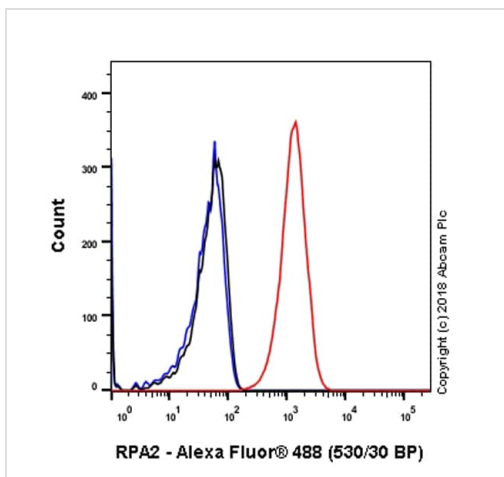
Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunocytochemistry/ Immunofluorescence analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling RPA32/RPA2 with purified ab76420 at 1:50 (2.28 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



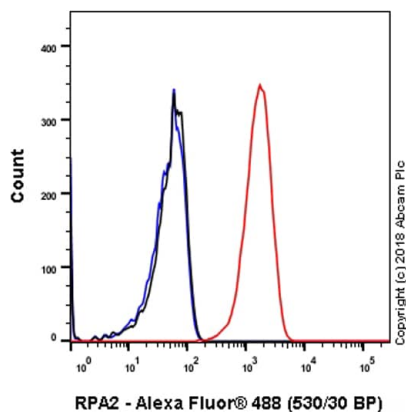
Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1:50 (2.28 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



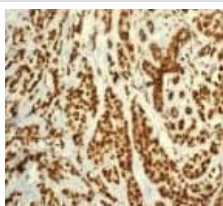
Flow Cytometry (Intracellular) - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Intracellular Flow Cytometry analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling RPA32/RPA2 with purified ab76420 at 1/200 dilution (0.58 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (**ab172730**) - Black. Unlabeled control - Blue. Untreated cells - Green



Flow Cytometry (Intracellular) - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1/200 dilution (0.58 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG ([ab172730](#)) - Black. Unlabeled control - Blue. Untreated cells - Green



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma using ab76420 (unpurified) at 1/250 dilution.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-RPA32/RPA2 antibody [EPR2877Y] (ab76420)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors