abcam

ab236044

Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR2877Y
Purification technique	Affinity purification Protein A
Concentration	1.02 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

WB

Expected

Species	Mouse, Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Rat
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Rat
Dilution info	-
Notes	-

Expected

Species	Human

Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information RPA2

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:17596542).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab236044 is the carrier-free version of ab76420.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

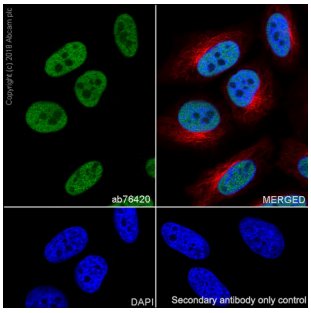
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

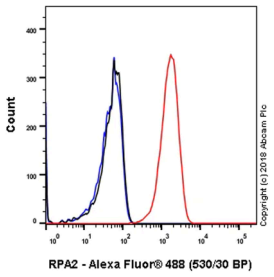
12 product images



Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RPA32/RPA2 antibody

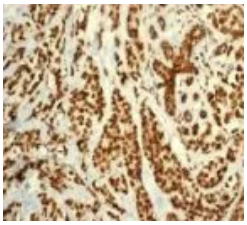
Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1:50 (2.28 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha 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.This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab236044)



Flow Cytometry (Intracellular) - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Flow Cytometry (Intracellular) staining using rabbit Anti-RPA32/RPA2 antibody

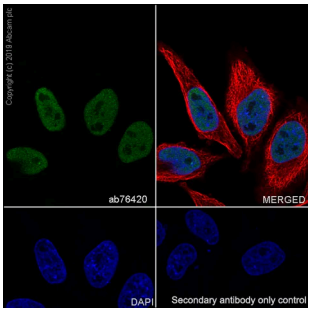
Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1/200 dilution (0.58 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) - Black. Unlabeled control - Blue. Untreated cells - GreenThis data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab236044)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RPA32/RPA2 antibody

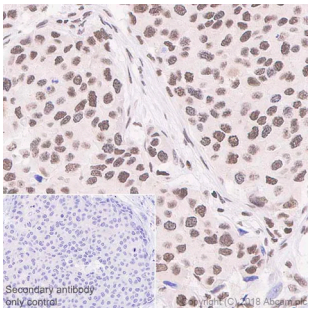
Immunohistochemical analysis of paraffin-embedded human breast carcinoma using ab76420 (unpurified) at 1/250 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76420).



Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RPA32/RPA2 antibody

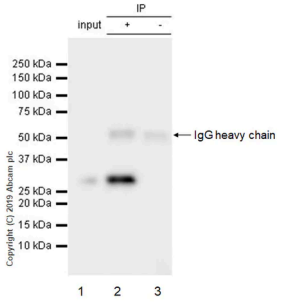
Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1:50 dilution (2.0 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76420).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RPA32/RPA2 antibody

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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76420).



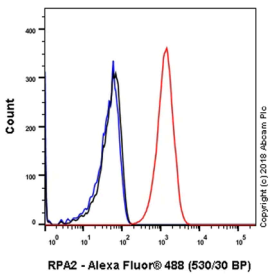
Immunoprecipitation - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76420).

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

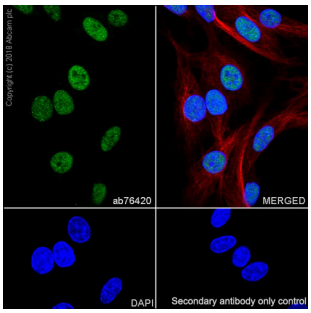
Predicted band size: 29 kDa



Flow Cytometry (Intracellular) - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Flow Cytometry (Intracellular) staining using rabbit Anti-RPA32/RPA2 antibody

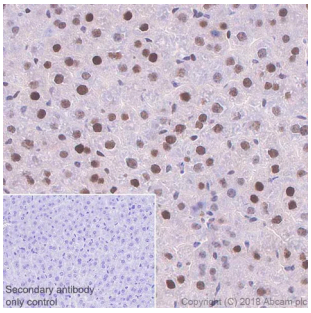
Intracellular Flow Cytometry analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling RPA32/RPA2 with purified ab76420 at 1/200 dilution (0.58 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) - Black. Unlabeled control - Blue. Untreated cells - GreenThis data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab236044)



Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RPA32/RPA2 antibody

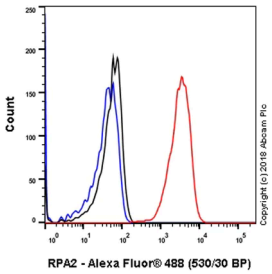
Immunocytochemistry/ Immunofluorescence analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling RPA32/RPA2 with purified ab76420 at 1:50 (2.28 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [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.This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab236044)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RPA32/RPA2 antibody

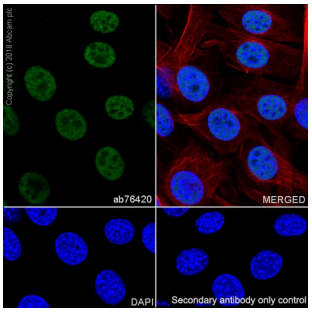
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse liver tissue sections labeling RPA32/RPA2 with purified ab76420 at 1/100 dilution (1 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76420).



Flow Cytometry (Intracellular) - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Flow Cytometry (Intracellular) staining using rabbit Anti-RPA32/RPA2 antibody

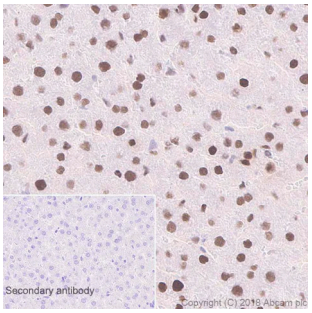
Intracellular Flow Cytometry analysis of C6 (rat glial tumor glial cell) cells labeling RPA32/RPA2 with purified ab76420 at 1/200 dilution (0.58 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) - Black. Unlabeled control - Blue. Untreated cells - GreenThis data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab236044)



Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RPA32/RPA2 antibody

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.This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab236044)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPA32/RPA2 antibody [EPR2877Y] - BSA and Azide free (ab236044)

RPA32/RPA2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RPA32/RPA2 antibody

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 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. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76420).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.