

Product datasheet

Anti-RPA32/RPA2 antibody [EPR2876(2)] ab109084

Recombinant RabMAb

★★★★☆ 1 Abreviews 8 Images

Overview

Product name	Anti-RPA32/RPA2 antibody [EPR2876(2)]
Description	Rabbit monoclonal [EPR2876(2)] to RPA32/RPA2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, ICC/IF Unsuitable for: IP
Species reactivity	Reacts with: Rat, Human
Immunogen	Synthetic peptide within Human RPA32/RPA2 aa 1-100. The exact sequence is proprietary.
Positive control	WB: HeLa, HUVEC, HepG2, and MCF7 cell lysates; IHC-P: Human colon and Human ovary carcinoma tissues. ICC/IF: C6 and HeLa cells Flow Cyt: C6 and HeLa cells
General notes	Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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 production

For more information [see here](#).

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

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR2876(2)
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab109084** 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
WB		1/1000 - 1/10000. Predicted molecular weight: 29 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
Flow Cyt		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Application notes Is unsuitable for IP.

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

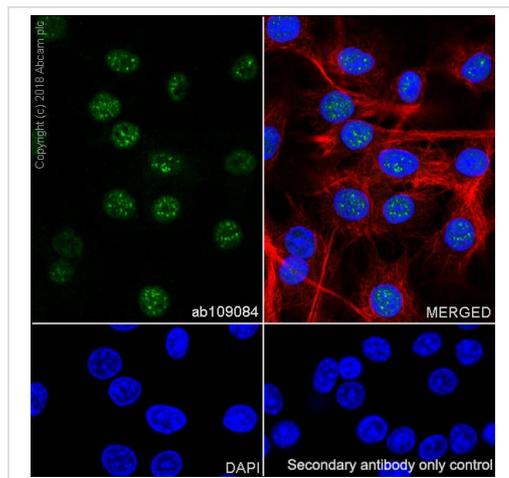
Phosphorylated in a cell-cycle-dependent manner (from the S phase until mitosis).

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

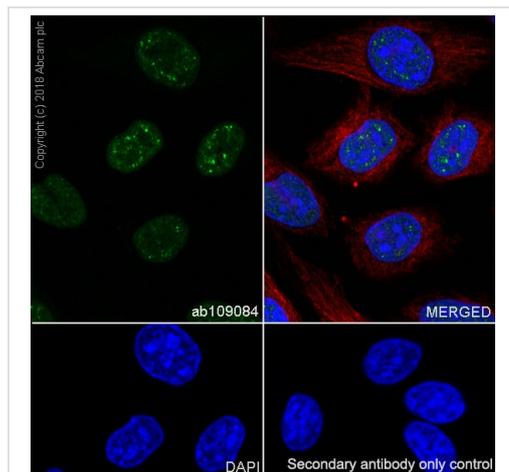
Nucleus. Nucleus > PML body. Also present in PML nuclear bodies. Redistributes to discrete nuclear foci upon DNA damage.

Images



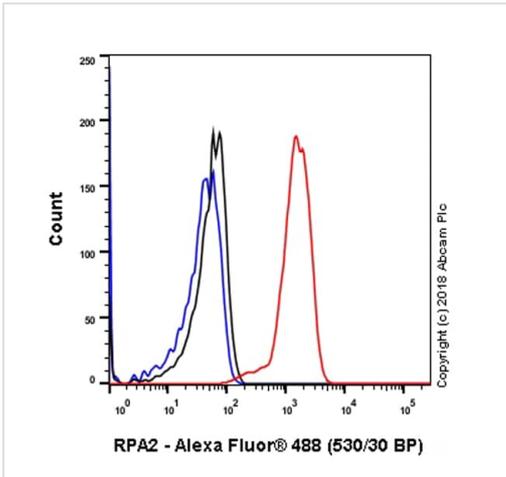
Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2876(2)] (ab109084)

Immunocytochemistry/ Immunofluorescence analysis of C6 (rat glial tumor glial cell) cells labeling RPA32/RPA2 with purified ab109084 at 1:50 (9.34 $\mu\text{g/ml}$). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 $\mu\text{g/ml}$). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1:1000 (2 $\mu\text{g/ml}$) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



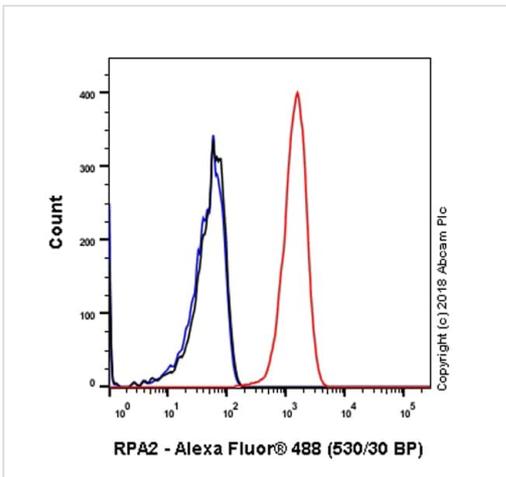
Immunocytochemistry/ Immunofluorescence - Anti-RPA32/RPA2 antibody [EPR2876(2)] (ab109084)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab109084 at 1:50 (9.34 $\mu\text{g/ml}$). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 $\mu\text{g/ml}$). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1:1000 (2 $\mu\text{g/ml}$) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



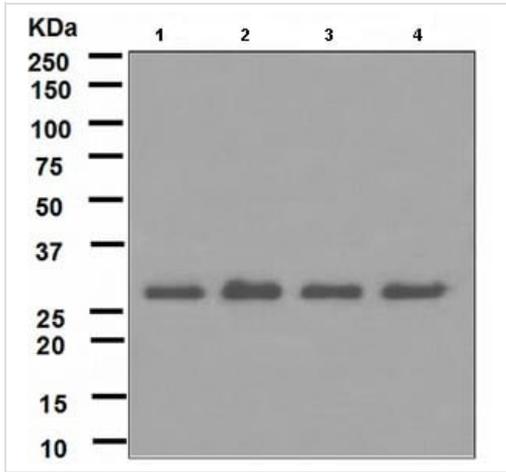
Flow Cytometry - Anti-RPA32/RPA2 antibody
[EPR2876(2)] (ab109084)

Flow Cytometry analysis of C6 (rat glial tumor glial cell) cells labeling RPA32/RPA2 with purified ab109084 at 1:460 dilution (1.01 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 - Anti-RPA32/RPA2 antibody
[EPR2876(2)] (ab109084)

Flow Cytometry analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling RPA32/RPA2 with purified ab109084 at 1:460 dilution (1.01 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



Western blot - Anti-RPA32/RPA2 antibody
[EPR2876(2)] (ab109084)

All lanes : Anti-RPA32/RPA2 antibody [EPR2876(2)] (ab109084)
at 1/1000 dilution

Lane 1 : HeLa cell lysate

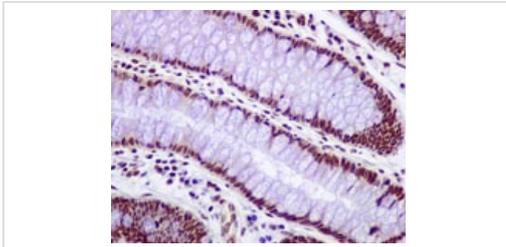
Lane 2 : HUVEC cell lysate

Lane 3 : HepG2 cell lysate

Lane 4 : MCF7 cell lysate

Lysates/proteins at 10 µg per lane.

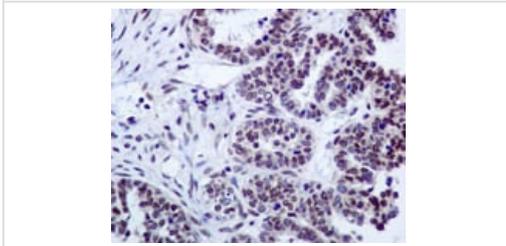
Predicted band size: 29 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-RPA32/RPA2 antibody
[EPR2876(2)] (ab109084)

ab109084 at 1/250 dilution staining RPA32/RPA2 in Human colon
by Immunohistochemistry, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6
before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-RPA32/RPA2 antibody
[EPR2876(2)] (ab109084)

ab109084 at 1/250 dilution staining RPA32/RPA2 in Human ovary
carcinoma by Immunohistochemistry, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6
before commencing with IHC staining protocol.

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 [EPR2876(2)]
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Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- 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

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