

Product datasheet

Anti-Survivin antibody [EP2880Y] ab76424

Recombinant RabMAb

★★★★★ 6 Abreviews 64 References 19 Images

Overview

Product name	Anti-Survivin antibody [EP2880Y]
Description	Rabbit monoclonal [EP2880Y] to Survivin
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, IP, Flow Cyt, ICC/IF, Sandwich ELISA
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Survivin aa 1-100 (N terminal). The exact sequence is proprietary. Database link: O15392
Positive control	HeLa and Jurkat lysates; human urinary bladder carcinoma and human colonic adenocarcinoma tissues; A549; Ramos; Human bladder carcinoma
General notes	<p>A trial size is available to purchase for this antibody.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p> <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> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

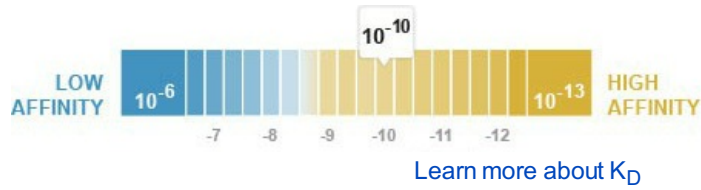
Properties

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.

Dissociation constant (K_D)

K_D = 4.40 x 10⁻¹⁰ M



Storage buffer

pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 59% PBS, 40% Glycerol, 0.5% BSA

Purity

Protein A purified

Clonality

Monoclonal

Clone number

EP2880Y

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab76424** 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
IHC-P	★★★★★	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Signal amplification system might be necessary or the use of polymerized HRP secondary antibodies. For unpurified use at 1/250 - 1/500.
WB	★★★★★	1/5000 - 1/20000. Detects a band of approximately 16 kDa (predicted molecular weight: 16 kDa).
IP		1/150. For unpurified use at 1:10.
Flow Cyt		1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/50.
ICC/IF	★★★★★	1/100 - 1/250.
Sandwich ELISA		Use a concentration of 0.5 µg/ml. Can be paired for Sandwich ELISA with Goat polyclonal to Survivin (ab27468) . For sandwich ELISA, use this antibody as detection at 0.5µg/ml with ab27468 as capture.

Target

Function

Component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced

microtubule stabilization and spindle assembly. The complex with RAN plays a role in mitotic spindle formation by serving as a physical scaffold to help deliver the RAN effector molecule TPX2 to microtubules. May play a role in neoplasia. May counteract a default induction of apoptosis in G2/M phase. Inhibitor of caspase-3 and caspase-7. Isoform 2 and isoform 3 do not appear to play vital roles in mitosis. Isoform 3 shows a marked reduction in its anti-apoptotic effects when compared with the displayed wild-type isoform.

Tissue specificity

Expressed only in fetal kidney and liver, and to lesser extent, lung and brain. Abundantly expressed in adenocarcinoma (lung, pancreas, colon, breast, and prostate) and in high-grade lymphomas. Also expressed in various renal cell carcinoma cell lines.

Sequence similarities

Belongs to the IAP family.
Contains 1 BIR repeat.

Developmental stage

Expression is cell cycle-dependent and peaks at mitosis.

Domain

The BIR repeat is necessary and sufficient for HBXIP binding.

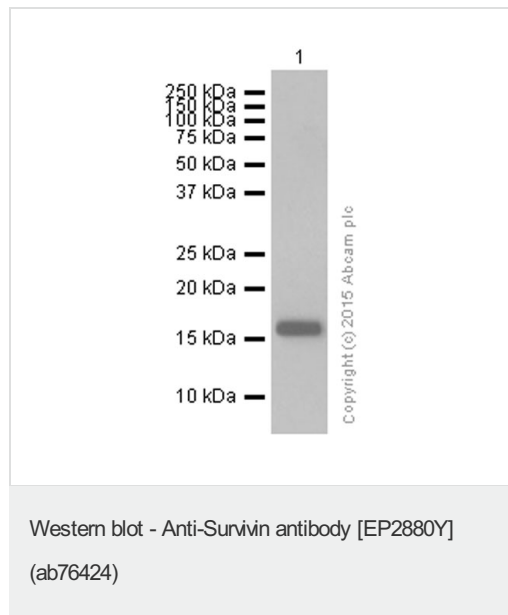
Post-translational modifications

Ubiquitination is required for centrosomal targeting.
In vitro phosphorylation at Thr-117 by AURKB/STK12 prevents interaction with INCENP and localization to mitotic chromosomes.

Cellular localization

Cytoplasm. Nucleus. Chromosome. Chromosome > centromere. Cytoplasm > cytoskeleton > spindle. Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Colocalizes with AURKB at mitotic chromosomes.

Images



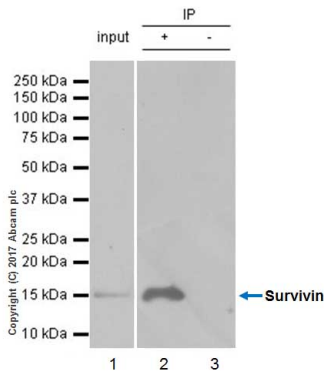
Anti-Survivin antibody [EP2880Y] (ab76424) at 1/5000 dilution (purified) + A549 (Human lung carcinoma epithelial cell) whole cell lysates at 15 µg

Secondary

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

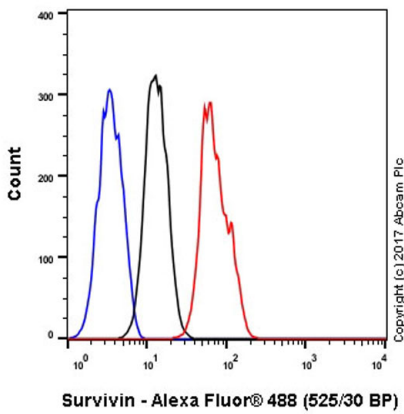
Predicted band size: 16 kDa

Blocking and diluting buffer : 5% NFDM/TBST



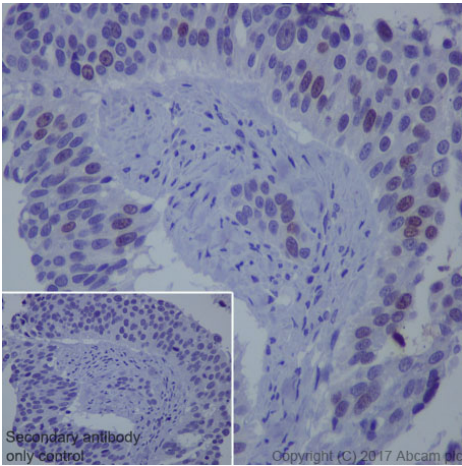
Immunoprecipitation - Anti-Survivin antibody
[EP2880Y] (ab76424)

ab76424 (purified) at 1:150 dilution (5µg) immunoprecipitating Survivin in Ramos whole cell lysate.
Lane 1 (input): Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysate 10µg
Lane 2 (+): ab76424 & Ramos whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab76424 in Ramos whole cell lysate
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDm/TBST.



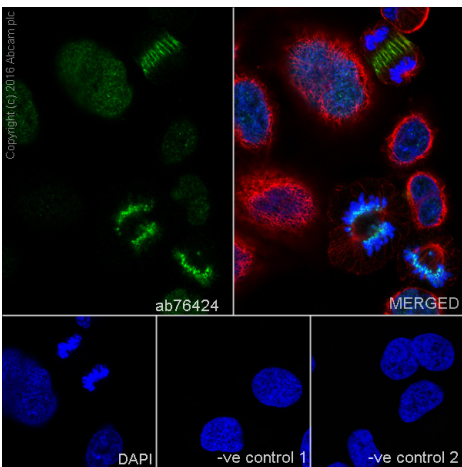
Flow Cytometry - Anti-Survivin antibody [EP2880Y]
(ab76424)

Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Survivin with purified ab76424 at 1:500 dilution (5 µg/ml) (red). Cells were fixed with 80% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human bladder carcinoma tissue sections labeling Survivin with Purified ab76424 at 1:1000 dilution (2.52 µg/ml). Heat mediated antigen retrieval was performed using Tris/EDTA Buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ab97051 Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1:500 dilution. PBS instead of the primary antibody was used as the negative control.

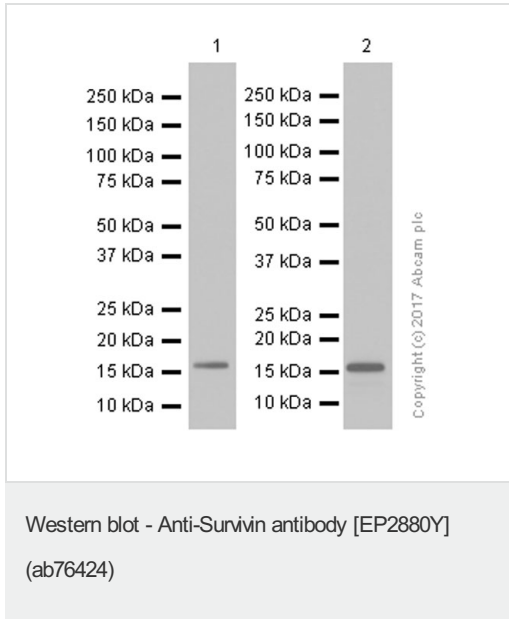


Immunocytochemistry/ Immunofluorescence - Anti-Survivin antibody [EP2880Y] (ab76424)

Immunofluorescent staining of MCF-7 cells labelling Bcl-2 with purified ab76424 at 1/1000. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. The cells were co-stained with ab7291, a mouse anti-tubulin (1/1000) using ab150120, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/1000) as the secondary antibody. Nuclei counterstained with DAPI (blue).

Control 1: primary antibody (1/100) and secondary antibody, ab150120, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500).

Control 2: ab7291 (1/1000) and secondary antibody, ab150077, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/500).



All lanes : Anti-Survivin antibody [EP2880Y] (ab76424) at 1/5000 dilution (purified)

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

Lane 2 : Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysates

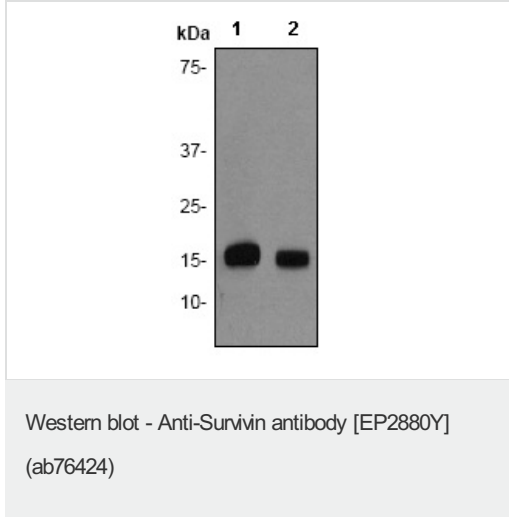
Lysates/proteins at 15 µg per lane.

Secondary

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

Predicted band size: 16 kDa

Blocking and diluting buffer : 5% NFDM/TBST



All lanes : Anti-Survivin antibody [EP2880Y] (ab76424) at 1/10000 dilution (unpurified)

Lane 1 : HeLa lysates

Lane 2 : Jurkat lysates

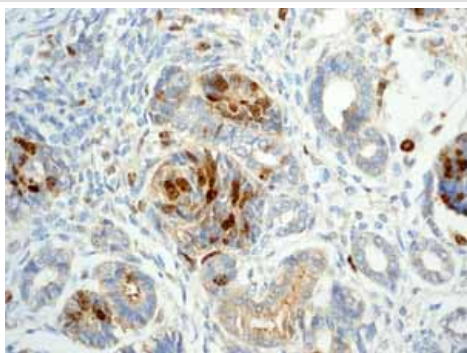
Lysates/proteins at 10 µg per lane.

Secondary

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

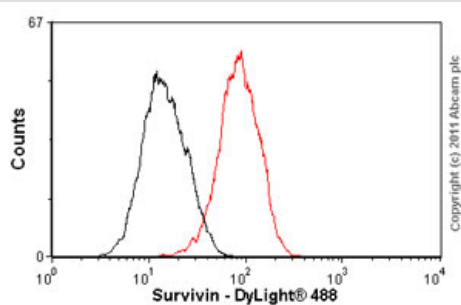
Predicted band size: 16 kDa

Observed band size: 16 kDa



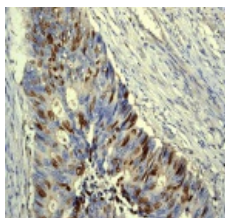
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Unpurified ab76424 showing positive staining in Fetal kidney tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



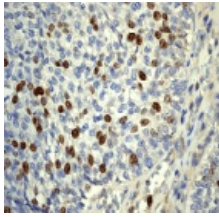
Flow Cytometry - Anti-Survivin antibody [EP2880Y] (ab76424)

Overlay histogram showing HeLa cells stained with unpurified ab76424 (red line). The cells were fixed with methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76424, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit monoclonal IgG (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a decreased signal in HeLa cells fixed with 4% paraformaldehyde/permeabilized with 0.1% PBS-Tween 20 used under the same conditions.



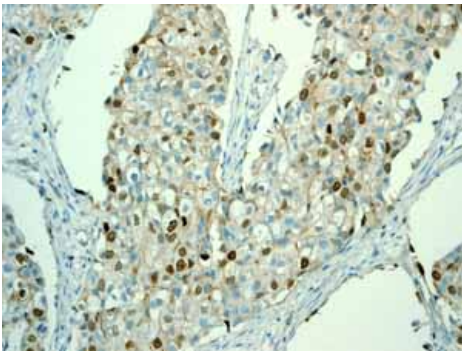
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Unpurified ab76424 at 1/250 dilution staining Survivin in human colonic adenocarcinoma by Immunohistochemistry, Paraffin-embedded tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



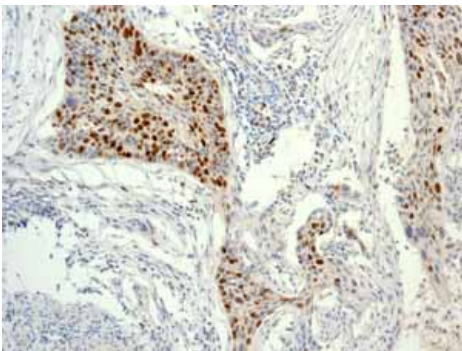
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Unpurified ab76424 at 1/250 dilution staining Survivin in human urinary bladder carcinoma by Immunohistochemistry, Paraffin-embedded tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



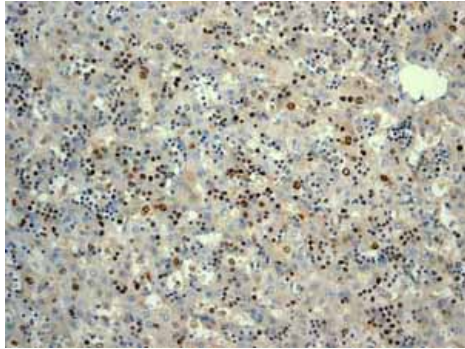
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Unpurified ab76424 showing positive staining in breast carcinoma tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



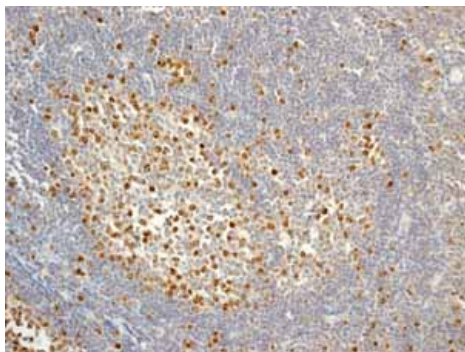
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Unpurified ab76424 showing positive staining in cervical carcinoma tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



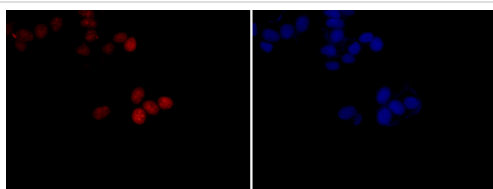
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Unpurified ab76424 showing positive staining in fetal liver tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



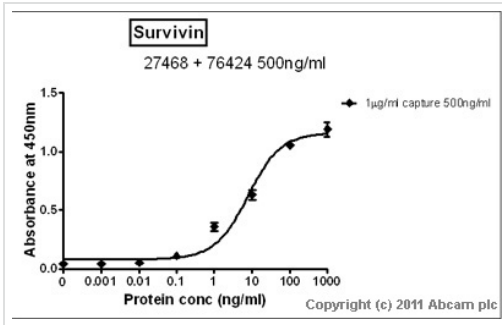
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Survivin antibody [EP2880Y] (ab76424)

Unpurified ab76424 showing positive staining in normal tonsil tissue. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



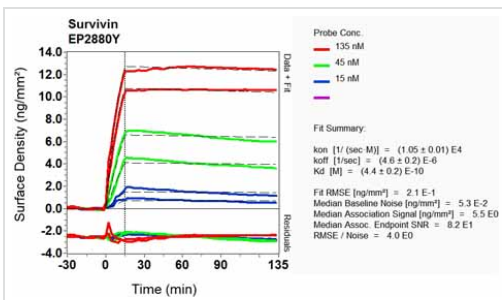
Immunocytochemistry/ Immunofluorescence - Anti-Survivin antibody [EP2880Y] (ab76424)

Immunocytochemistry/Immunofluorescence analysis of MCF-7 cells labelling Survivin with unpurified ab76424 at 1/100. Cells were fixed with 4% paraformaldehyde for 20 minutes at room temperature. Cells were incubated with the primary antibody overnight. An Alexa Fluor® 555-conjugated anti-rabbit IgG was used as the secondary antibody. Left - Survivin, Right - DAPI.



Sandwich ELISA - Anti-Survivin antibody [EP2880Y] (ab76424)

Standard curve for Survivin (Analyte: [ab87202](#)); dilution range 1pg/ml to 1µg/ml using Capture Antibody [ab27468](#) at 1µg/ml and Detector Antibody [abRabbit monoclonal \[EP2880Y\] to Survivin \(ab76424\)](#) at 0.5µg/ml. Concentration of [Rabbit monoclonal \[EP2880Y\] to Survivin \(ab76424\)](#) may vary from lot to lot; please use this curve as guideline.

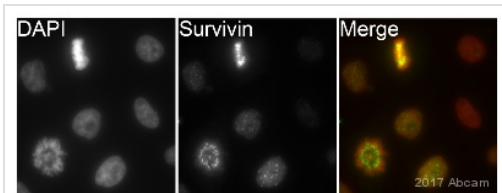


Other - Anti-Survivin antibody [EP2880Y] (ab76424)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)



Immunocytochemistry/ Immunofluorescence - Anti-Survivin antibody [EP2880Y] (ab76424)

This image is courtesy of an abreview by Kirk Mcmanus

ab76424 staining Survivin in the HeLa cell line from Human cervix by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton X-100. Samples were incubated with primary antibody (1/500 in PBS) for 1 hour at 22°C. Ab150081 (1/200) was used as the secondary antibody.

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