abcam

ab52771

Anti-YAP1 antibody [EP1674Y]

Anti-YAP1 antibody [EP1674Y] (ab52771) is a rabbit monoclonal antibody detecting YAP1 in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF**. Suitable for **Human**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 240 publications
- Trusted since 2007

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP1674Y
Purification technique	Affinity purification Protein A
Concentration	0.089 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/20
Notes	**For unpurified use at 1:70.**

WB

Tested

Species	Human
Dilution info	1/5000 - 1/50000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1:50.

IHC-P

Tested

Species	Human
Dilution info	1/50
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information YAP1

Function	Transcriptional regulator with dual roles as a coactivator and corepressor. Critical downstream regulatory target in the Hippo signaling pathway, crucial for organ size control and tumor suppression by restricting proliferation and promoting apoptosis (PubMed:17974916, PubMed:18280240, PubMed:18579750, PubMed:21364637, PubMed:30447097). The Hippo signaling pathway core involves a kinase cascade featuring STK3/MST2 and STK4/MST1, along with its regulatory partner SAV1, which phosphorylates and activates LATS1/2 in complex with their regulatory protein, MOB1. This activation leads to the phosphorylation and inactivation of the YAP1 oncoprotein and WWTR1/TAZ (PubMed:18158288). Phosphorylation of YAP1 by LATS1/2 prevents its nuclear translocation, thereby regulating the expression of its target genes (PubMed:18158288, PubMed:26598551, PubMed:34404733). The transcriptional regulation of gene expression requires TEAD transcription factors and modulates cell growth, anchorage-independent growth, and induction of epithelial-mesenchymal transition (EMT) (PubMed:18579750). Plays a key role in tissue tension and 3D tissue shape by regulating the cortical actomyosin network, acting via ARHGAP18, a Rho GTPase activating protein that suppresses F-actin polymerization (PubMed:25778702). It also suppresses ciliogenesis by acting as a transcriptional corepressor of TEAD4 target genes AURKA and PLK1 (PubMed:25849865). In conjunction with WWTR1, regulates TGFB1-dependent SMAD2 and SMAD3 nuclear accumulation (By similarity). Synergizes with WBP2 to enhance PGR activity (PubMed:16772533). Isoform 2. Activates the C-terminal fragment (CTF) of ERBB4 (isoform 3). Isoform 3. Activates the C-terminal fragment (CTF) of ERBB4 (isoform 3).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Product Specifications
Anti-YAP1 antibody [EP1674Y] (ab52771) was developed by Abcam using patented rabbit monoclonal antibody technology and is validated for use in Flow Cyt (Intra), ICC/IF, IHC-P, IP, WB in human samples.
Anti-YAP1 antibody [EP1674Y] (ab52771) specifically detects YAP1 (UniProt ID: P46937; Molecular weight: 54kDa) and is sold in a convenient trial size to enable initial testing (20 µL) and larger sizes for subsequent scaling up experiments (100 µL and 1 mL).

Quality and Validation
Abcam's high quality manufacturing and validation processes ensure Anti-YAP1 antibody [EP1674Y] (ab52771) has high sensitivity and specificity alongside high lot-to-lot consistency and reproducibility.
Anti-YAP1 antibody [EP1674Y] (ab52771) has been cited over 249 times in peer reviewed journals and is trusted by the scientific community.
Anti-YAP1 antibody [EP1674Y] (ab52771) has 16 independent reviews from customers.

Related Products
Conjugation-ready, carrier free format available for antibody clone EP1674Y - ab271866.
Antibody clone EP1674Y is also available pre-conjugated to a variety of labels for your convenience - HRP, APC, PE, Alexa Fluor® 488, Alexa Fluor® 647, Alexa Fluor® 594, Alexa Fluor® 568, Alexa Fluor® 555, Alexa Fluor® 750 (ab195857, ab310870, ab310933, ab310970, ab311089, ab311686, ab312962, ab313171, ab321666).
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.

Species reactivity
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

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.

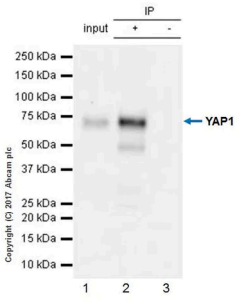
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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10 product images



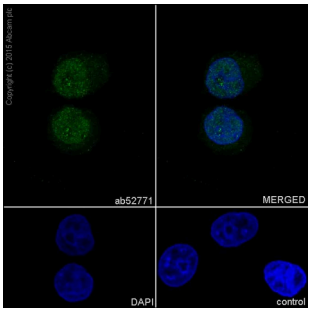
Immunoprecipitation - Anti-YAP1 antibody [EP1674Y] (ab52771)

ab52771 (purified) at 1:20 dilution (0.5 µg) immunoprecipitating YAP1 in HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate.
Lane 1: HeLa whole cell lysate 10 µg input.
Lane 2: ab52771 in HeLa whole cell lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab52771 in HeLa whole cell lysate.
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking/Diluting buffer: 5% NFDM/TBST.

All lanes:
Immunoprecipitation - Anti-YAP1 antibody [EP1674Y] (ab52771)

Predicted band size: 54 kDa

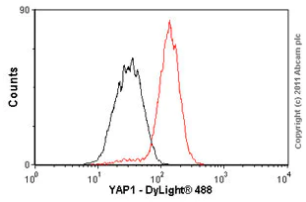


Immunocytochemistry/ Immunofluorescence - Anti-YAP1 antibody [EP1674Y] (ab52771)

YAP1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-YAP1 antibody

Immunocytochemistry/Immunofluorescence analysis of MCF-7 (Human breast adenocarcinoma cell line) cells labeling YAP1 with purified ab52771 at 1/500.
Cells were fixed with 4% paraformaldehyde and permeabilized by 0.1% Triton X-100. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (ab150077).

Nuclei counterstained with DAPI (blue).



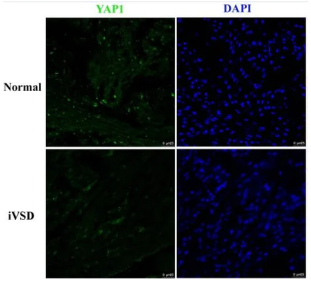
Flow Cytometry (Intracellular) - Anti-YAP1 antibody [EP1674Y] (ab52771)

YAP1 Flow Cytometry (Intracellular) staining using rabbit Anti-YAP1 antibody

Overlay histogram showing HeLa (Human epithelial cell line from cervix adenocarcinoma) cells stained with unpurified ab52771 (**red line**).
The cells were fixed with 80% 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 (ab52771, 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 IgG (monoclonal) (1 µg/1x10^6 cells) used under the same conditions.

Acquisition of >5,000 events was performed.



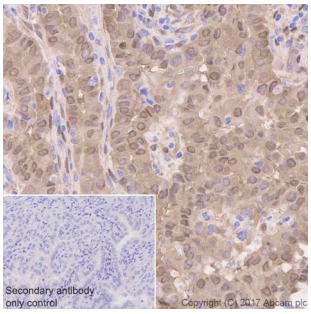
Ye et al PLoS One. 2015 Oct 1;10(10):e0139712. doi: 10.1371/journal.pone.0139712. eCollection 2015. Fig 2. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Immunocytochemistry/ Immunofluorescence - Anti-YAP1 antibody [EP1674Y] (ab52771)

YAP1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-YAP1 antibody

Immunofluorescence revealed that YAP1 expression was significantly lower in iVSD hearts compared to control hearts.
YAP1 (green), and DAPI (blue) staining are shown; Scale bar = 25 µm.

Cryosections of human heart tissue were blocked using 10% FBS for 30 min, and then incubated with anti YAP1 (ab52771, 1:200) at room temperature for 2 h. The slides were then incubated with the following secondary antibody, Alexa Fluor® 488-conjugated anti-rabbit (Abcam, ab150073; 1:1,000 dilution). Cell nuclei were stained with DAPI.

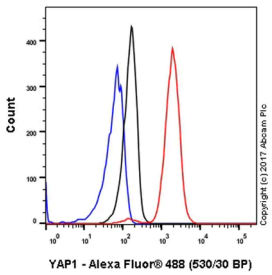


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-YAP1 antibody [EP1674Y] (ab52771)

YAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-YAP1 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue sections labeling YAP1 with purified ab52771 at 1:50 dilution (1.78 µg/ml).
Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody.

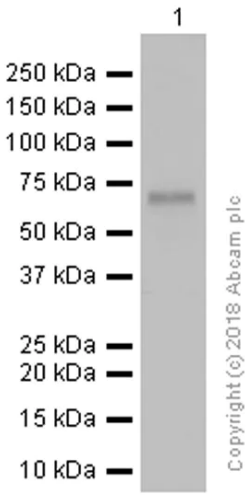
PBS instead of the primary antibody was used as the negative control.



Flow Cytometry (Intracellular) - Anti-YAP1 antibody [EP1674Y] (ab52771)

YAP1 Flow Cytometry (Intracellular) staining using rabbit Anti-YAP1 antibody

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling YAP1 with purified ab52771 at 1/20 dilution (10µg/ml) (**red**).
Cells were fixed with 4% paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluorr® 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**).



Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771)

Blocking/Diluting buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771) at 1/5000 dilution

All lanes:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 15 µg

Secondary

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

Predicted band size: 54 kDa

Observed band size: 72 kDa

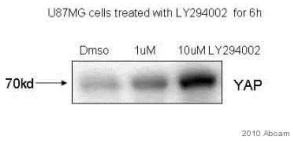


Image courtesy of an anonymous customer review.

Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771)

YAP1 Western blot staining using rabbit Anti-YAP1 antibody

All lanes are unpurified ab52771 at a 1/1000 dilution plus whole cell lysate prepared from U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells, treated with DMSO or 1 µM and 10 µM LY294002, 50 µg positive control loaded.
Primary antibody was incubated for 16 hours at 4°C.

Blocking step was performed using 5% milk for 1 hour at 23°C.

Secondary used was a goat polyclonal conjugated to HRP, at a 1/10,000 dilution.

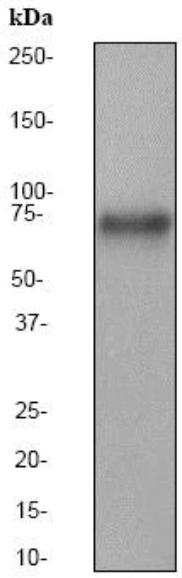
All lanes:
Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771)

Developed using the ECL technique.

Predicted band size: 54 kDa

Observed band size: 70 kDa

Exposure time: 1min



Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771)

All lanes:
Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771) at 1/50000 dilution

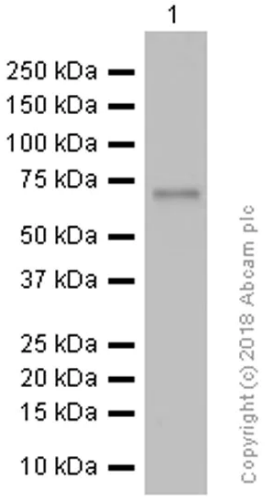
All lanes:
HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 54 kDa

Observed band size: 72 kDa



Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771)

YAP1 Western blot staining of Human thyroid cancer lysates using rabbit Anti-YAP1 antibody

Blocking/Dilution buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-YAP1 antibody [EP1674Y] (ab52771) at 1/50000 dilution

All lanes:
Human thyroid cancer lysates at 15 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 54 kDa

Observed band size: 72 kDa

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