abcam

ab32053

Anti-Cyclin B1 antibody [Y106]

Anti-Cyclin B1 antibody [Y106] (ab32053) is a rabbit monoclonal antibody detecting Cyclin B1 in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF**. Suitable for **Human**.

- KO validated for confirmed specificity
- Biophysical QC for unrivalled batch-batch consistency
- Over 180 publications
- Trusted since 2006

Recombinant | RabMAb | KO Validated | 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), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	Y106
Purification technique	Affinity purification Protein A
Specificity	This antibody is specific for Human cyclin B1. It does not cross-react with other cyclin family members.
Epitope	ab32053 reacts with an epitope located in teh C terminal region of Cyclin B1.
Concentration	0.35 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 1/100.**

WB

Tested

Species	Human
Dilution info	1/50000
Notes	**For unpurified use at 1/3000 - 1/20000.**

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	**For unpurified use at 1/50.**

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/400
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/20.

IHC-P

Tested

Species	Human

Dilution info	1/250
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 CCNB1

Function	Essential for the control of the cell cycle at the G2/M (mitosis) transition.

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

What is this antibody validated in?
Anti-Cyclin B1 antibody [Y106] (ab32053) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human samples.

What is the molecular weight of Cyclin B1?
Anti-Cyclin B1 [Y106] (ab32053) specifically detects a band for Cyclin B1 (UniProt: P14635) at a molecular weight of 58kDa.

Trusted by the scientific community
Anti-Cyclin B1 [Y106] (ab32053) was first used in a scientific publication in 2006 and has been cited over 180 times in peer-reviewed journals.

Specificity confirmed
The specificity of Anti-Cyclin B1 antibody [Y106] (ab32053) has been confirmed by Western blot testing in CCNB1 Knockout HAP1 cells.

Other related products
We have a range of other formats of antibody clone [Y106] also available for your convenience: ab32053, Carrier free - ab156447, HRP - ab193977, PE - ab210615, Alexa Fluor® 555 - ab214381

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

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.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

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

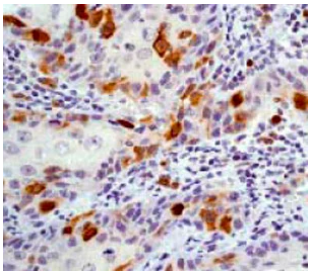
We do not recommend this combination. It is not covered by our product promise.

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.

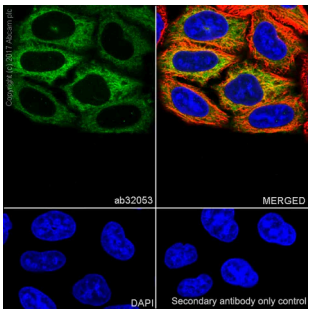
10 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin B1 antibody [Y106] (ab32053)

Cyclin B1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cyclin B1 antibody

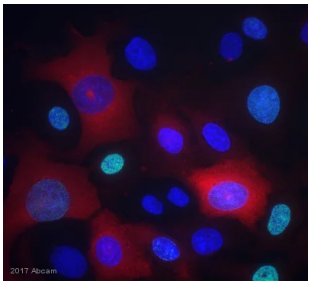
Unpurified ab32053 at a 1:100 dilution staining Human cyclin B1 in human skin carcinoma, using Immunohistochemistry, Paraffin Embedded Tissue.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin B1 antibody [Y106] (ab32053)

Cyclin B1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cyclin B1 antibody

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cyclin B1 with Purified ab32053 at 1:100 dilution. Cells were fixed in 100% Methanol. ab150077 Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

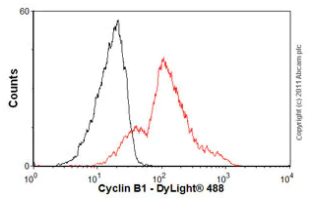


This image is courtesy of a customer review submitted by Stephanie Hilss.

Immunocytochemistry/ Immunofluorescence - Anti-Cyclin B1 antibody [Y106] (ab32053)

Cyclin B1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cyclin B1 antibody

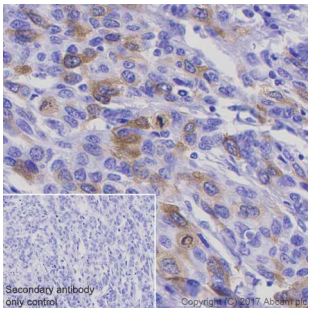
Unpurified ab32053 staining Cyclin B1 in the U2OS cell line from human by ICC/IF (Immunocytochemistry/immunofluorescence).Cells were fixed with formaldehyde,permeabilized with 1% Triton X-100 in PBS and blocked with 1% BSA for 1 hour at 37°C.Alexa Fluor® 594-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-Cyclin B1 antibody [Y106] (ab32053)

Cyclin B1 Flow Cytometry (Intracellular) staining using rabbit Anti-Cyclin B1 antibody

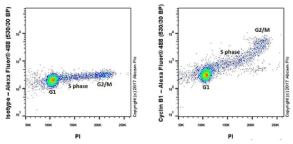
Overlay histogram showing Jurkat cells stained with unpurified ab32053 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32053, 1/20 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) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin B1 antibody [Y106] (ab32053)

Cyclin B1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cyclin B1 antibody

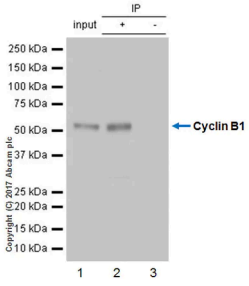
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cervical carcinoma tissue sections labeling Cyclin B1 with Purified ab32053 at 1:250 dilution (1.47 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Flow Cytometry (Intracellular) - Anti-Cyclin B1 antibody [Y106] (ab32053)

Cyclin B1 Flow Cytometry (Intracellular) staining using rabbit Anti-Cyclin B1 antibody

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cyclin B1 with purified ab32053 at 1/400 dilution (1µg/ml) (Right). Cells were fixed with 80% Methanol and permeabilised with 0.1% Tween-20. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Left). Cells were pre-treated with 20µg/ml RNaseA for 30min to minimize the binding between PI and RNA.Then intracellular stained with ab32053 and PI.



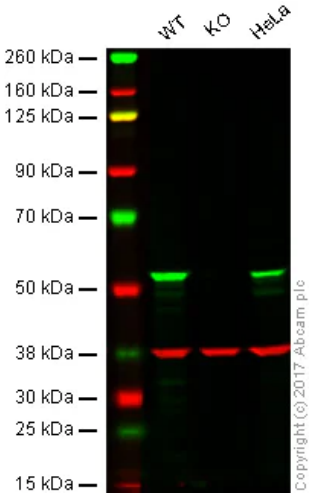
Immunoprecipitation - Anti-Cyclin B1 antibody [Y106] (ab32053)

ab32053 (purified) at 1:20 dilution (2µg) immunoprecipitating Cyclin B1 in Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10µg
Lane 2 (+): ab32053 & Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32053 in Jurkat (Human T cell leukemia T lymphocyte) 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.

All lanes:
Immunoprecipitation - Anti-Cyclin B1 antibody [Y106] (ab32053)

Predicted band size: 48 kDa



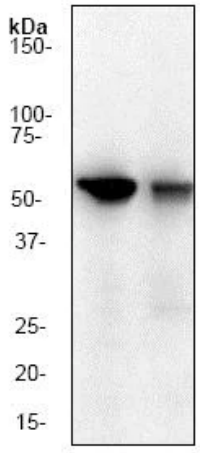
Western blot - Anti-Cyclin B1 antibody [Y106] (ab32053)

Cyclin B1 Western blot staining using rabbit Anti-Cyclin B1 antibody

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)
Lane 2: CCNB1 knockout HAP1 whole cell lysate (20 µg)
Lane 3: HeLa whole cell lysate (20 µg)
Lanes 1 - 3: Merged signal (red and green). Green - ab32053 observed at 55 kDa. Red - loading control, ab8245, observed at 37 kDa.
Unpurified ab32053 was shown to specifically react with CCNB1 in wild-type HAP1 cells. No band was observed when CCNB1 knockout samples were examined. Wild-type and CCNB1 knockout samples were subjected to SDS-PAGE. ab32053 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/3000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-Cyclin B1 antibody [Y106] (ab32053)

Predicted band size: 48 kDa



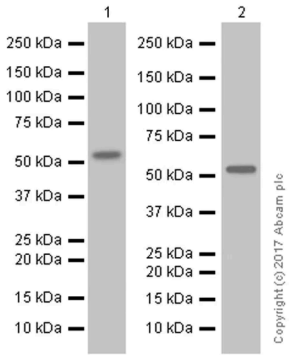
Western blot - Anti-Cyclin B1 antibody [Y106] (ab32053)

All lanes:
Western blot - Anti-Cyclin B1 antibody [Y106] (ab32053) at 1/20000 dilution

Lane 1:
Hela cell lysate.

Lane 2:
Jurkat cell lysate.

Predicted band size: 48 kDa



Western blot - Anti-Cyclin B1 antibody [Y106] (ab32053)

Blocking and diluting buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-Cyclin B1 antibody [Y106] (ab32053) at 1/50000 dilution

Lane 1:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 15 µg

Lane 2:
HEK-293 (Human embryonic kidney 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: 48 kDa

Observed band size: 58 kDa

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