abcam

Product datasheet

Anti-Cyclin B1 antibody [Y106] - BSA and Azide free ab156447

KO VALIDATED Recombinant RabMAb

8 Images

Overview

Product name	Anti-Cyclin B1 antibody [Y106] - BSA and Azide free
Description	Rabbit monoclonal [Y106] to Cyclin B1 - BSA and Azide free
Host species	Rabbit
Specificity	This antibody is specific for Human cyclin B1.It does not cross-react with other cyclin family members.
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	ab156447 is the carrier-free version of **ab32053**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. 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. 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. 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	Y106
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab156447 in the following tested applications.

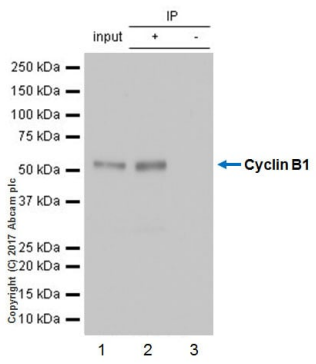
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 58 kDa.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Essential for the control of the cell cycle at the G2/M (mitosis) transition.
Sequence similarities	Belongs to the cyclin family. Cyclin AB subfamily.
Developmental stage	Accumulates steadily during G2 and is abruptly destroyed at mitosis.
Post-translational modifications	Ubiquitinated by the SCF(NIPA) complex during interphase, leading to its destruction. Not ubiquitinated during G2/M phases.
Cellular localization	Cytoplasm. Nucleus. Cytoplasm > cytoskeleton > centrosome.

Images



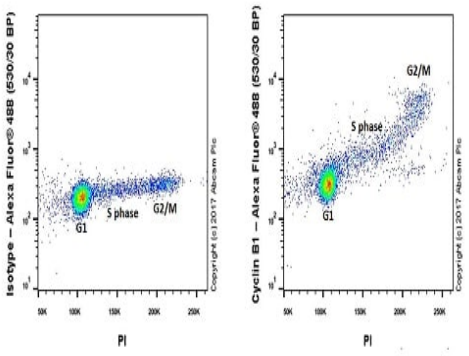
Immunoprecipitation - Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

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.

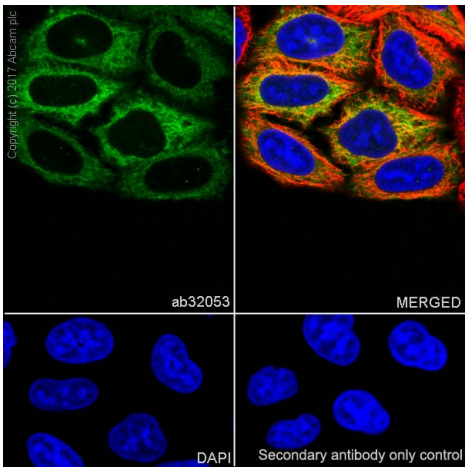
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32053**).



Flow Cytometry (Intracellular) - Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cyclin B1 with purified **ab32053** at 1/400 dilution (1 µg/ml) (red). 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). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). 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.

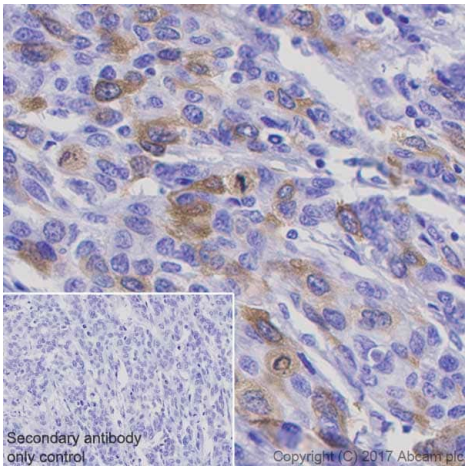
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32053**).



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

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.

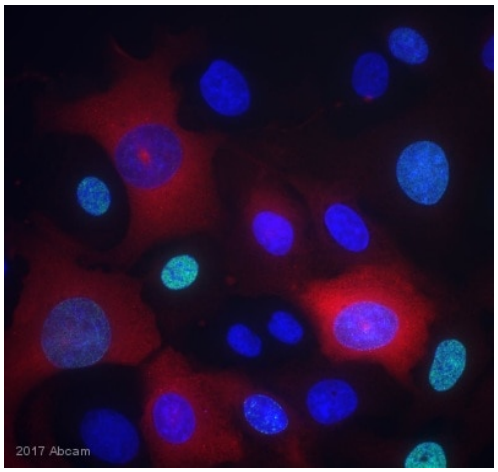
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32053**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32053**).

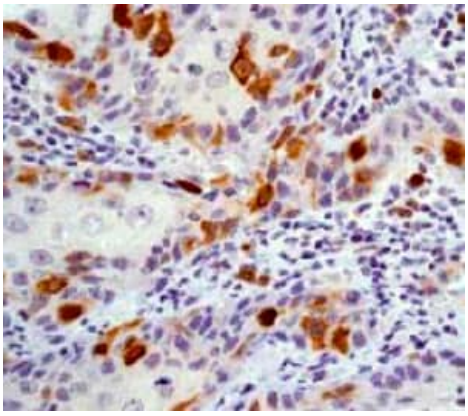


Immunocytochemistry/ Immunofluorescence - Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

This image is courtesy of an Abreview submitted by Stephanie Hilss.

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.

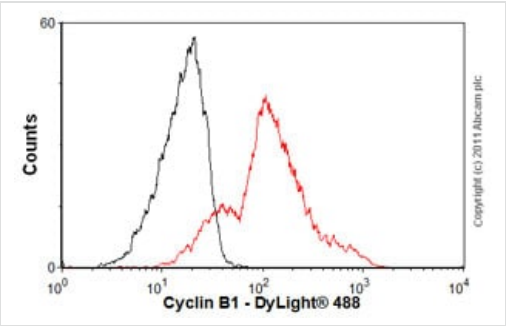
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32053**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

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

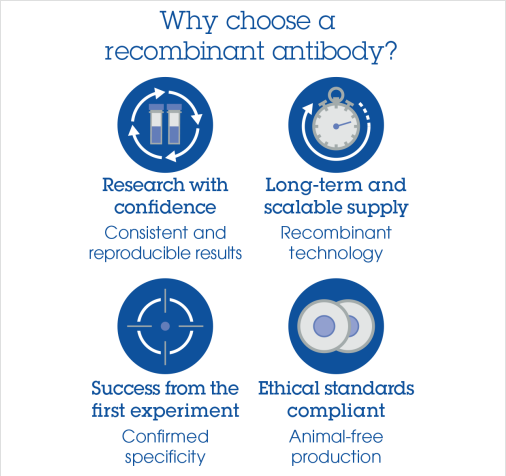
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32053**).



Flow Cytometry (Intracellular) - Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32053**).



Anti-Cyclin B1 antibody [Y106] - BSA and Azide free (ab156447)

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