

Product datasheet

Anti-Cyclin A2 antibody [EPR17351] α b181591

Recombinant RabMAb

★★★★★ **3 Abreviews** **79 References** [12 Images](#)

Overview

Product name	Anti-Cyclin A2 antibody [EPR17351]
Description	Rabbit monoclonal [EPR17351] to Cyclin A2
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat, C6, RAW 264.7 and PC-12 whole cell lysates; HeLa Untreated, asynchronous cells, HeLa G1/S arrested cells (thymidine treatment) and HeLa G2/M arrested cells (sequential thymidine and nocodazole treatments) cell lysates; Human tonsil and fetal kidney lysates; Rat spleen lysate. IHC-P: Human tonsil, Human cervix carcinoma, rat colon and mouse endometrium tissues. ICC/IF: HeLa cells.
General notes	<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>

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.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17351

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab181591 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
ICC/IF		1/500.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	★★★★★ (1)	1/2000. Detects a band of approximately 50 kDa (predicted molecular weight: 47 kDa).

Target

Function

Essential for the control of the cell cycle at the G1/S (start) and the G2/M (mitosis) transitions.

Sequence similarities

Belongs to the cyclin family. Cyclin AB subfamily.

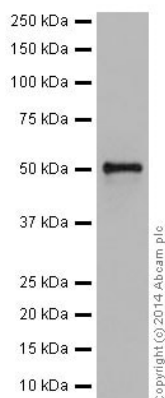
Developmental stage

Accumulates steadily during G2 and is abruptly destroyed at mitosis.

Cellular localization

Nucleus. Cytoplasm. Cytoplasmic when associated with SCAPER.

Images



Western blot - Anti-Cyclin A2 antibody [EPR17351]
(ab181591)

Anti-Cyclin A2 antibody [EPR17351] (ab181591) at 1/20000
dilution + Jurkat (Human T cell leukemia cell line from peripheral
blood) whole cell lysate at 20 µg

Secondary

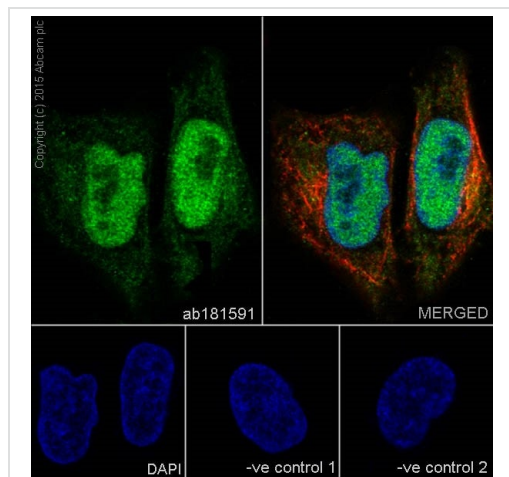
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000
dilution

Predicted band size: 47 kDa

Observed band size: 50 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin A2 antibody [EPR17351] (ab181591)

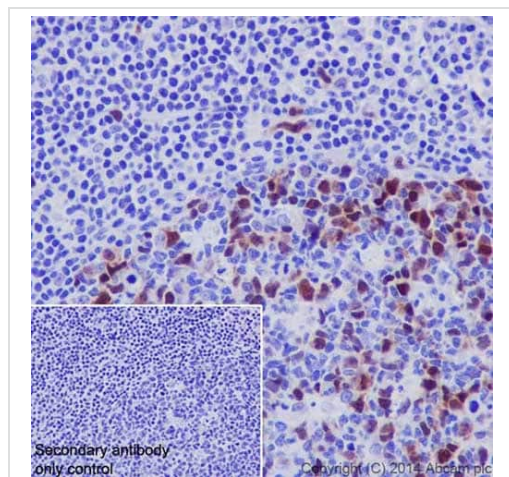
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Cyclin A2 with ab181591 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/500 dilution (green). Confocal image showing nuclear and weakly cytoplasmic staining on HeLa cells. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [EPR17351]- Loading Control ([ab7291](#)) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) preadsorbed ([ab150120](#)) at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab181591 at 1/500 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) preadsorbed ([ab150120](#)) at 1/500 dilution.

-ve control 2: Anti-alpha Tubulin antibody [EPR17351]- Loading Control ([ab7291](#)) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/500 dilution.

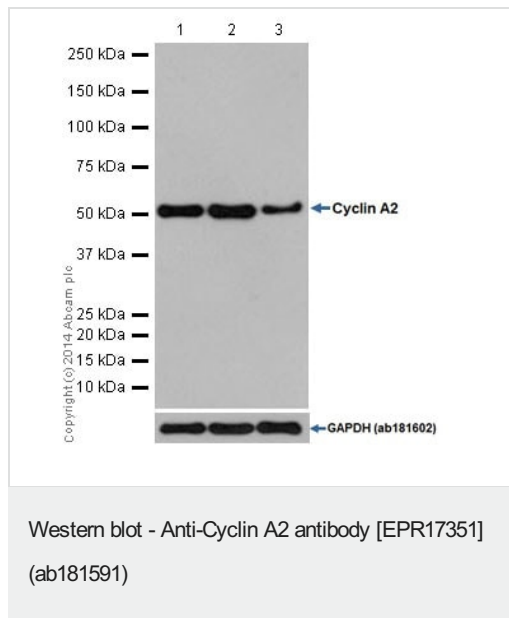


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin A2 antibody [EPR17351] (ab181591)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling Cyclin A2 with ab181591 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Nuclear and weak cytoplasmic staining on germinal center cells of Human tonsil tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



All lanes : Anti-Cyclin A2 antibody [EPR17351] (ab181591) at 1/20000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate; Untreated, asynchronous cells ([ab136811](#))

Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate; G1/S arrested cells (thymidine treatment) ([ab136811](#))

Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate; G2/M arrested cells (sequential thymidine and nocodazole treatments) ([ab136811](#))

Lysates/proteins at 1 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated or Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

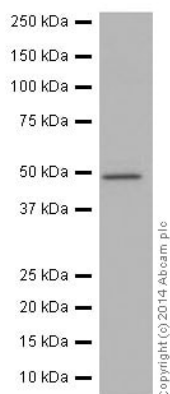
Predicted band size: 47 kDa

Observed band size: 50 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

Cyclin A2 is down regulated at the G2/M phase.



Western blot - Anti-Cyclin A2 antibody [EPR17351]
(ab181591)

Anti-Cyclin A2 antibody [EPR17351] (ab181591) + Human tonsil lysate at 10 µg

Secondary

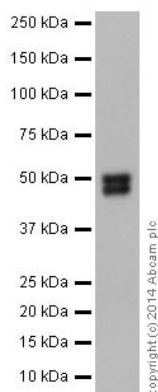
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 47 kDa

Observed band size: 50 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Cyclin A2 antibody [EPR17351]
(ab181591)

Anti-Cyclin A2 antibody [EPR17351] (ab181591) at 1/2000 dilution + Human fetal kidney lysate at 10 µg

Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

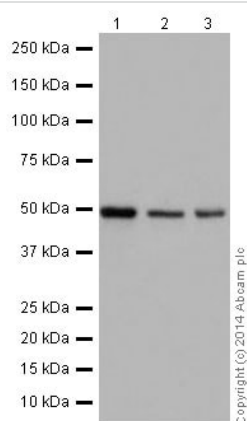
Predicted band size: 47 kDa

Observed band size: 50 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The smaller band is due to a tissue-specific splice variant, PMID 22745723.



Western blot - Anti-Cyclin A2 antibody [EPR17351]
(ab181591)

All lanes : Anti-Cyclin A2 antibody [EPR17351] (ab181591) at 1/2000 dilution

Lane 1 : C6 (Rat glial tumor cell line) whole cell lysate

Lane 2 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

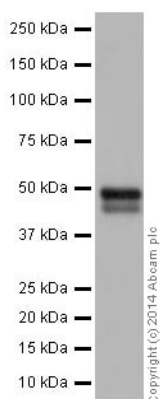
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 47 kDa

Observed band size: 50 kDa

Exposure time: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Cyclin A2 antibody [EPR17351]
(ab181591)

Anti-Cyclin A2 antibody [EPR17351] (ab181591) at 1/2000 dilution
+ Rat spleen lysate at 10 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

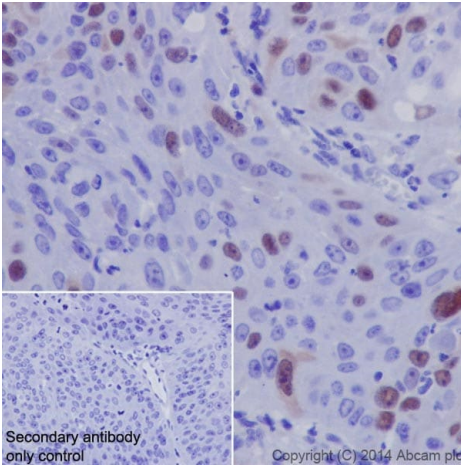
Predicted band size: 47 kDa

Observed band size: 50 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The smaller band is due to a tissue-specific splice variant, PMID 22745723.

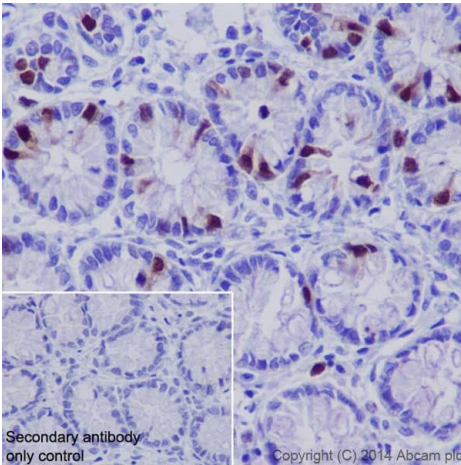


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin A2 antibody [EPR17351] (ab181591)

Immunohistochemical analysis of paraffin-embedded Human cervix carcinoma tissue labeling Cyclin A2 with ab181591 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Nuclear and weak cytoplasmic staining on some tumor cells in Human cervix carcinoma tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

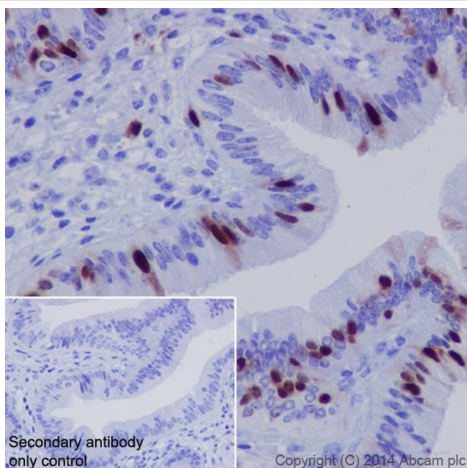


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin A2 antibody [EPR17351] (ab181591)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling Cyclin A2 with ab181591 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Nuclear and weak cytoplasmic staining on a proportion of epithelial cells in rat colon tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin A2 antibody [EPR17351] (ab181591)

Immunohistochemical analysis of paraffin-embedded mouse endometrium tissue labeling Cyclin A2 with ab181591 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear and weak cytoplasmic staining on a proportion of epithelial cells in mouse endometrial tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 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-Cyclin A2 antibody [EPR17351] (ab181591)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- 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

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors