abcam

Product datasheet

Anti-Cyclin A2 antibody [EPRR19346] - BSA and Azide free ab251533



11 Images

Overview

Product name Anti-Cyclin A2 antibody [EPRR19346] - BSA and Azide free

Description Rabbit monoclonal [EPRR19346] to Cyclin A2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IP, IHC-P, ICC/IF, WB

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

General notes ab251533 is the carrier-free version of ab211736.

> 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 cellbased 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 pH: 7.2

Constituent: PBS

Carrier free Yes

Clonality Monoclonal
Clone number EPRR19346

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab251533 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
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.
WB		Use at an assay dependent concentration. Detects a band of approximately 50 kDa (predicted molecular weight: 49 kDa).

Target

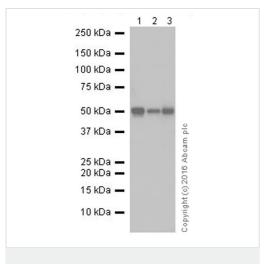
Function Essential for the control of the cell cycle at the G1/S (start) and the G2/M (mitosis) transitions.

Sequence similaritiesBelongs 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
[EPRR19346] - BSA and Azide free (ab251533)

All lanes : Anti-Cyclin A2 antibody [EPRR19346] (**ab211736**) at 1/10000 dilution

Lane 1: HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3 : SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

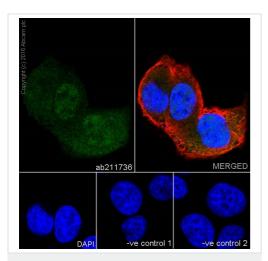
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 49 kDa **Observed band size:** 50 kDa

Exposure time: 3 seconds

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.

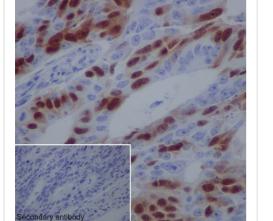
Blocking and dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin A2 antibody [EPRR19346] - BSA and Azide free (ab251533)

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.

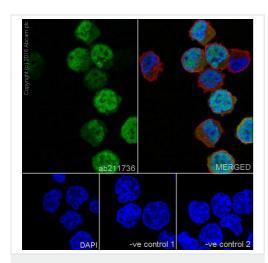
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Cyclin A2 with ab211736 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and weakly cytoplasmic staining on HeLa cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red). The negative controls are as follows:- -ve control 1: ab211736 at 1/250 dilution followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution. -ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.



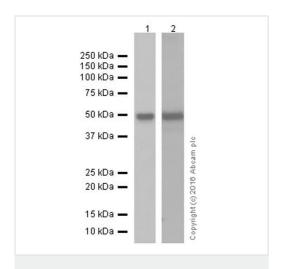
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin A2 antibody
[EPRR19346] - BSA and Azide free (ab251533)

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling Cyclin A2 with ab211736 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear and weak cytoplasmic staining on some tumor cells of human colon cancer 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.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin A2 antibody [EPRR19346] - BSA and Azide free (ab251533)



Western blot - Anti-Cyclin A2 antibody

[EPRR19346] - BSA and Azide free (ab251533)

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized K562 (Human chronic myelogenous leukemia cell line from bone marrow) cells labeling Cyclin A2 with ab211736 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and weak cytoplasmic staining on K562 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red). The negative controls are as follows: -- ve control 1: ab211736 at 1/250 dilution followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution. -ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

All lanes : Anti-Cyclin A2 antibody [EPRR19346] (**ab211736**) at 1/1000 dilution

Lane 1: Human fetal liver lysate

Lane 2: Human fetal heart lysate

Lysates/proteins at 10 µg per lane.

Secondary

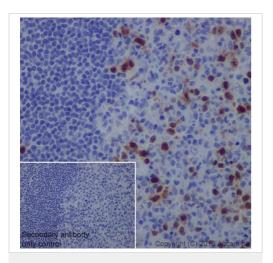
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 49 kDa Observed band size: 50 kDa

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.

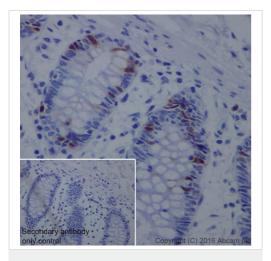
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times: Lane 1: 15 seconds; Lane 2: 3 minutes.



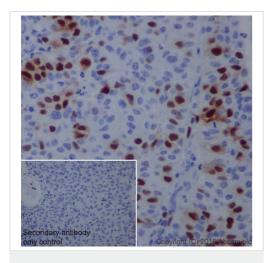
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin A2 antibody
[EPRR19346] - BSA and Azide free (ab251533)

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling Cyclin A2 with <u>ab211736</u> at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) 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) (<u>ab97051</u>) 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 paraffinembedded sections) - Anti-Cyclin A2 antibody
[EPRR19346] - BSA and Azide free (ab251533)

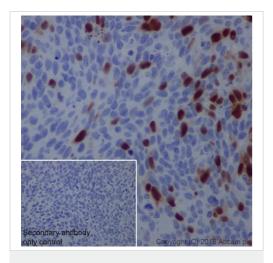
This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Cyclin A2 with <u>ab211736</u> at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Nuclear and weak cytoplasmic staining on a small proportion of epithelial cells of human 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) (<u>ab97051</u>) 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 paraffinembedded sections) - Anti-Cyclin A2 antibody

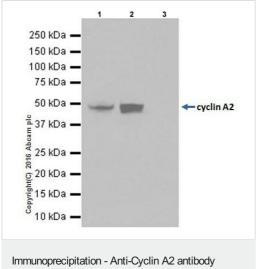
[EPRR19346] - BSA and Azide free (ab251533)

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.lmmunohistochemical analysis of paraffin-embedded human endometrial cancer tissue labeling Cyclin A2 with <u>ab211736</u> at 1/2000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Nuclear and weak cytoplasmic staining on some tumor cells of human endometrial cancer tissue is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

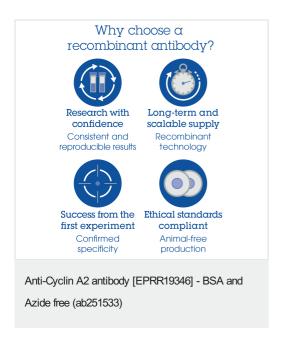


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin A2 antibody
[EPRR19346] - BSA and Azide free (ab251533)

This data was developed using <u>ab211736</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded human cervix cancer tissue labeling Cyclin A2 with <u>ab211736</u> at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Nuclear and weak cytoplasmic staining on some tumor cells of human cervix cancer 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) (<u>ab97051</u>) at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Cyclin A2 antibody [EPRR19346] - BSA and Azide free (ab251533) This data was developed using ab211736, the same antibody clone in a different buffer formulation. Cyclin A2 was immunoprecipitated from 0.35 mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab211736 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab211736 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution Lane 1: HeLa whole cell lysate 10µg (Input). Lane 2: ab211736 IP in HeLa whole cell lysate. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab211736 in HeLa whole cell lysate. Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 5 seconds.



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