abcam

ab247261

Anti-Cyclin A2 antibody [E399] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	E399
Purification technique	Affinity purification Protein A
Epitope	ab247261 reacts with an epitope located in the N terminal region of Cyclin A2
Concentration	1.027 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information CCNA2

Function	Cyclin which controls both the G1/S and the G2/M transition phases of the cell cycle. Functions through the formation of specific serine/threonine protein kinase holoenzyme complexes with the cyclin-dependent protein kinases CDK1 or CDK2. The cyclin subunit confers the substrate specificity of these complexes and differentially interacts with and activates CDK1 and CDK2 throughout the cell cycle.

Storage

Shipped at conditions	Blue Ice

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab247261 is the carrier-free version of ab32498.

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Compatibility
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.

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.

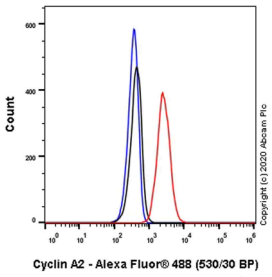
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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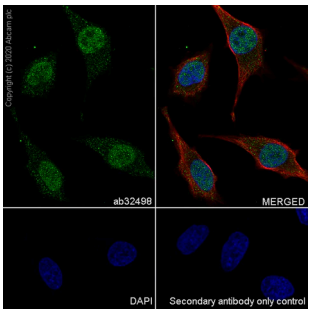
6 product images



Flow Cytometry - Anti-Cyclin A2 antibody [E399] - BSA and Azide free (ab247261)

Cyclin A2 Flow Cytometry staining using rabbit Anti-Cyclin A2 antibody

This data was developed using ab247261, the same antibody clone in a different buffer formulation.
Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling Cyclin A2 with Purified ab247261 at 1:30 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor™ 488, ab150077) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).

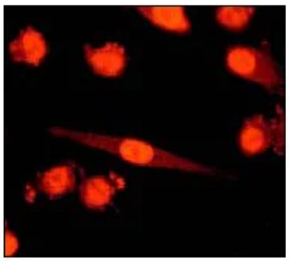


Immunocytochemistry/ Immunofluorescence - Anti-Cyclin A2 antibody [E399] - BSA and Azide free (ab247261)

Cyclin A2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cyclin A2 antibody

This data was developed using ab32498, the same antibody clone in a different buffer formulation.
Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cyclin A2 with Purified ab32498 at 1/50 dilution (5.66 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at

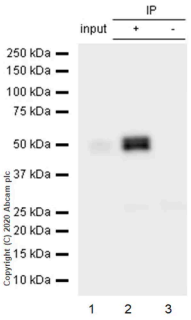
1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin A2 antibody [E399] - BSA and Azide free (ab247261)

Cyclin A2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cyclin A2 antibody

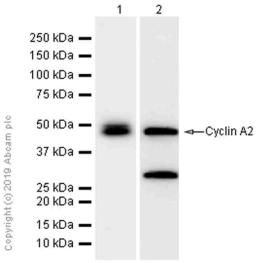
This data was developed using ab32498, the same antibody clone in a different buffer formulation.Immunofluorescent analysis of cyclin A expression in HeLa cells using 1/250 ab32498.



Immunoprecipitation - Anti-Cyclin A2 antibody [E399] - BSA and Azide free (ab247261)

This data was developed using ab32498, the same antibody clone in a different buffer formulation.
Purified ab32498 at 1/20 dilution (1µg) immunoprecipitating Cyclin A2 in K-562 whole cell lysate.
Lane 1 (input): K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate 10µg
Lane 2 (+): ab32498 + K-562 whole cell lysate.
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32498 in K-562 whole cell lysate.
VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000 dilution) was used for Western blotting.
Blocking Buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Observed band size: 50 kDa
All lanes:
Immunoprecipitation - Anti-Cyclin A2 antibody [E399] - BSA and Azide free (ab247261)

Predicted band size: 49 kDa



Western blot - Anti-Cyclin A2 antibody [E399] - BSA and Azide free (ab247261)

Cyclin A2 Western blot staining using rabbit Anti-Cyclin A2 antibody

The smaller band is due to a tissue-specific splice variant(PMID 22745723). The band of 35kDa maybe the cleaved form(PMID: 12176996).
All lanes:
Western blot - Anti-Cyclin A2 antibody [E399] (ab32498) at 1/2000 dilution

Lane 1:
K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate at 15 µg

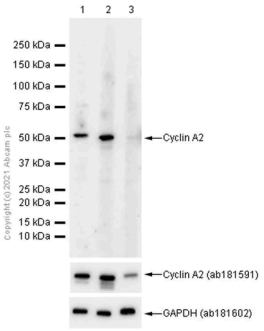
Lane 2:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 15 µg

Secondary

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

Predicted band size: 49 kDa

Observed band size: 50 kDa



Western blot - Anti-Cyclin A2 antibody [E399] - BSA and Azide free (ab247261)

Cyclin A2 Western blot staining using rabbit Anti-Cyclin A2 antibody

Cyclin A2 is down regulated at the G2/M phase.
All lanes:
Western blot - Anti-Cyclin A2 antibody [E399] (ab32498) at 1/1000 dilution

Lane 1:
HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate; Untreated, asynchronous cells (ab136811) at 20 µg

Lane 2:
HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate; G1/S arrested cells (thymidine treatment) (ab136811) at 20 µg

Lane 3:
HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate; G2/M arrested cells (sequential thymidine and nocodazole treatments) (ab136811) at 20 µg

Secondary

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

Predicted band size: 49 kDa

Observed band size: 50 kDa

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