abcam

# ab32498

# Anti-Cyclin A2 antibody [E399]

Recombinant | RabMAb | 20ul selling size

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | E399 |
| **Purification technique** | Affinity purification Protein A |
| **Epitope** | ab32498 reacts with an epitope located in the N terminal region of Cyclin A2 |
| **Concentration** | 0.298 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## IP

### Expected

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/20 |
| **Notes** | - |

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/30 |
| **Notes** | - |

## WB

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/1000 |
| **Notes** | - |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/50 |
| **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** | Conditional Ambient |
| **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

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.

## 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**

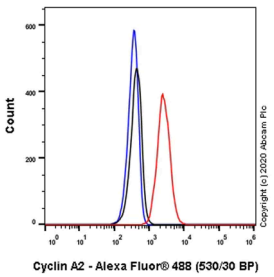
We do not recommend this combination. It is not covered by our product promise.

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.

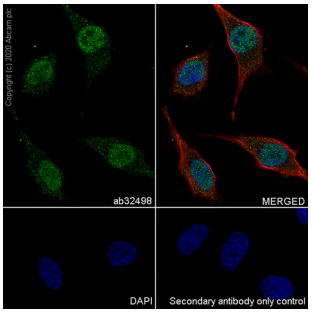
## 5 product images




### Flow Cytometry - Anti-Cyclin A2 antibody [E399] (ab32498)

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

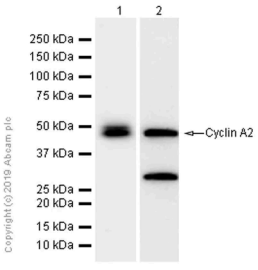
Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling Cyclin A2 with Purified ab32498 at 1:30 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor™ 488, ab150077) secondary 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] (ab32498)

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

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.




### Western blot - Anti-Cyclin A2 antibody [E399] (ab32498)

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

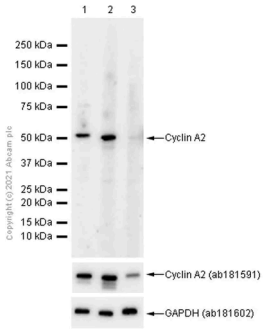
Lane 2:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 15 µg

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] (ab32498)

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

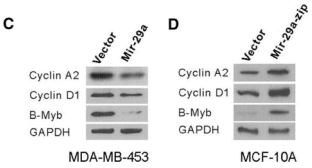



Image collected and cropped by CiteAb under a CC-BY license from the publication

## Western blot - Anti-Cyclin A2 antibody [E399] (ab32498)

Cyclin A2 western blot using anti-Cyclin A2 antibody [E399] ab32498. Publication image and figure legend from Wu, Z., Huang, X., et al., 2013, J Exp Clin Cancer Res, PubMed 24289849.

ab32498 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab32498 please see the product overview.

B-Myb acts as the downstream effector of mir-29a to regulate cell cycle. A, the scheme of the plasmid construction for the luciferase assay. B, relative luciferase activities of the cells (with or without mir-29a over-expression) transfected with either wild or mutant 3′-UTR of B-Myb; n = 5, Mean ± SD. C, protein levels of cyclin A2, cyclin D1 and B-Myb in MDA-MB-453 cells with or without mir-29a over-expression. D, protein levels of cyclin A2, cyclin D1 and B-Myb in MCF-10A cells with or without mir-29a knockdown.

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