


## Product datasheet

# Anti-Cyclin A2 antibody [E23.1] ab38

★★★★☆ 10 Abreviews 19 References 5 Images

### Overview

<b>Product name</b>	Anti-Cyclin A2 antibody [E23.1]
<b>Description</b>	Mouse monoclonal [E23.1] to Cyclin A2
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB, IP, IHC-Fr, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Chicken, Cow 
<b>Immunogen</b>	Fusion protein corresponding to Cow Cyclin A2.
<b>Positive control</b>	In Western Blot, ab38 gave a positive signal in the following whole cell lysates: HEK293; U20S; PC12; NIH3T3. This antibody gave a positive result in IHC in the following FFPE tissue: Human normal tonsil.
<b>General notes</b>	This antibody clone is manufactured by Abcam.  If you require this antibody in a particular buffer formulation or a particular conjugate for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a> or you can find further information <a href="#">here</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	E23.1
<b>Myeloma</b>	Sp2
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

### Applications

Our [Abpromise guarantee](#) covers the use of **ab38** in the following tested applications.

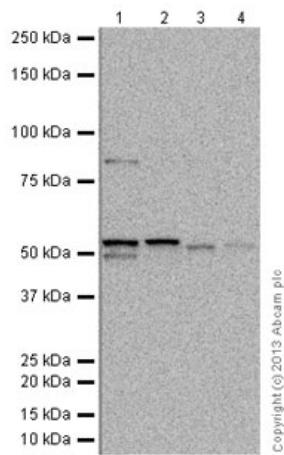
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★☆	Use a concentration of 5 µg/ml.
WB	★★★★☆	Use a concentration of 5 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 60 kDa).
IP	★★★★★	Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. PubMed: 22802651

## Target

<b>Function</b>	Essential for the control of the cell cycle at the G1/S (start) and the G2/M (mitosis) transitions.
<b>Sequence similarities</b>	Belongs to the cyclin family. Cyclin AB subfamily.
<b>Developmental stage</b>	Accumulates steadily during G2 and is abruptly destroyed at mitosis.
<b>Cellular localization</b>	Nucleus. Cytoplasm. Cytoplasmic when associated with SCAPER.

## Images



Western blot - Anti-Cyclin A2 antibody [E23.1]  
(ab38)

**All lanes :** Anti-Cyclin A2 antibody [E23.1]  
(ab38) at 5 µg/ml

**Lane 1 :** HEK293 (Human embryonic kidney  
cell line) Whole Cell Lysate

**Lane 2 :** U2OS (Human osteosarcoma cell  
line) Whole Cell Lysate

**Lane 3 :** PC12 (Rat adrenal  
pheochromocytoma cell line) Whole Cell  
Lysate

**Lane 4 :** NIH 3T3 (Mouse embryonic  
fibroblast cell line) Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

### Secondary

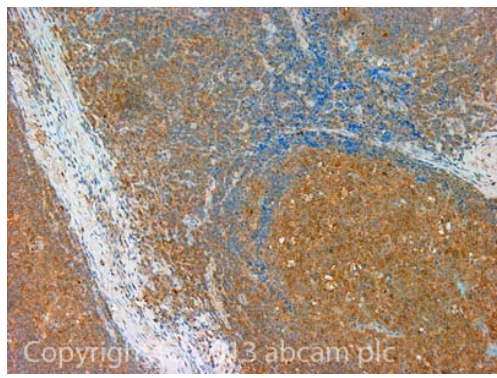
Goat Anti-Mouse IgG H&L (HRP)  
preadsorbed (ab97040) at 1/10000 dilution  
Developed using the ECL technique

Performed under reducing conditions.

**Predicted band size :** 60 kDa

**Observed band size :** 50 kDa

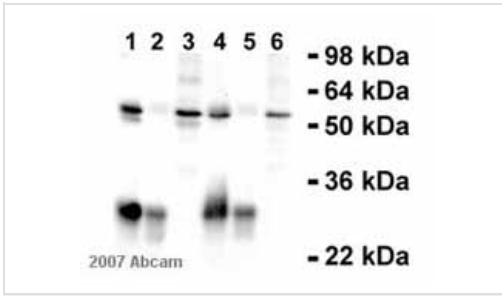
**Exposure time :** 20 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclin A2 antibody [E23.1] (ab38)

IHC image of Cyclin A staining in Human normal tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab38, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunoprecipitation - Anti-Cyclin A2 antibody

[E23.1] (ab38)

This image is courtesy of an anonymous Abreview

Immunoprecipitation using ab38 at 4µg/mg whole cell lysate diluted in RIPA buffer and incubated with Protein G matrix at 4°C for 12 hours.

This antibody can immunoprecipitate Cyclin A from both Human (293T) and Rat (PC12) cell extract. The species assigned as Cyclin A runs at ~55 kDa.

Lanes 1-3 = 293T

Lanes 4-6 = PC12

Lane 1: Cyclin A antibody IP

Lane 2: Control antibody IP

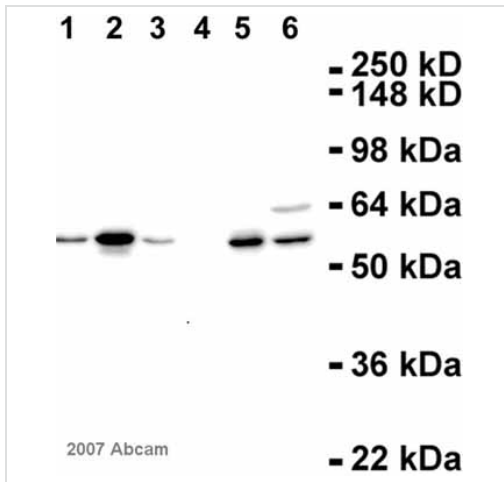
Lane 3: 293T whole cell lysate at 10%

Lane 4: Cyclin A antibody IP

Lane 5: Control antibody IP

Lane 6: PC12 whole cell lysate at 10%

The Western Blot antibody was ab38 at 2µg/ml



Western blot - Anti-Cyclin A2 antibody [E23.1]  
(ab38)

This image is courtesy of an anonymous Abreview

**All lanes :** Anti-Cyclin A2 antibody [E23.1]  
(ab38) at 2 µg/ml

**Lane 1 :** U2OS (Hu) whole cell lysate

**Lane 2 :** 293T (Hu) whole cell lysate

**Lane 3 :** Cos-7 (AGMk) whole cell lysate

**Lane 4 :** CHO (Hm) whole cell lysate

**Lane 5 :** PC12 (Rat) whole cell lysate

**Lane 6 :** 3T3 (Ms) whole cell lysate

Lysates/proteins at 30 µg per lane.

### Secondary

HRP conjugated goat anti-mouse at 1/5000  
dilution

Performed under reducing conditions.

**Predicted band size :** 60 kDa

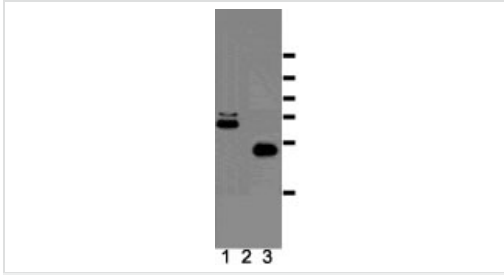
**Observed band size :** 58 kDa

**Additional bands at :** 64 kDa. We are  
unsure as to the identity of these extra bands.

**Exposure time :** 6 minutes

*This image is courtesy of an anonymous  
Abreview*

The membrane was blocked with 5% milk for  
1 hour at 21°C prior to incubation with the  
primary antibody for 12 hours at 4°C.



Western blot - Anti-Cyclin A2 antibody [E23.1] (ab38)

This image is courtesy of Julian Gannon, CRUK.

**Predicted band size :** 60 kDa

*This image is courtesy of Julian Gannon, CRUK.*

Western Blot of Swiss 3T3 cells showing presence of cyclin A in rapidly dividing cells (1) but absent in quiescent cells (2).

Recombinant cyclin A (3). Molecular weight markers 114, 98, 68, 57, 43 and 32 kD.

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Recombinant cyclin A (3). Molecular weight markers 114, 98, 68, 57, 43 and 32 kD.

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