


Product datasheet

Anti-Cyclin A2 antibody [E23.1] ab38

★★★★☆ 10 Abreviews 22 References 5 Images

Overview

Product name	Anti-Cyclin A2 antibody [E23.1]
Description	Mouse monoclonal [E23.1] to Cyclin A2
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB, IP, IHC-Fr, Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Chicken, Cow 
Immunogen	Fusion protein corresponding to Cow Cyclin A2.
Positive control	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.
General notes	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 orders@abcam.com or you can find further information here .

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	E23.1
Myeloma	Sp2
Isotype	IgG2a
Light chain type	kappa

Applications

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

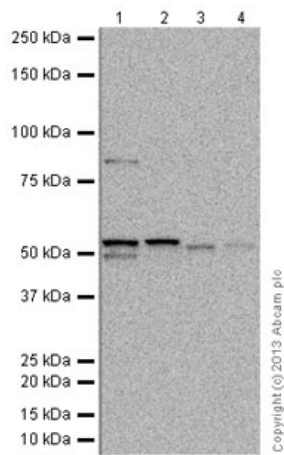
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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 ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

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 [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

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (ab97040) at 1/10000 dilution

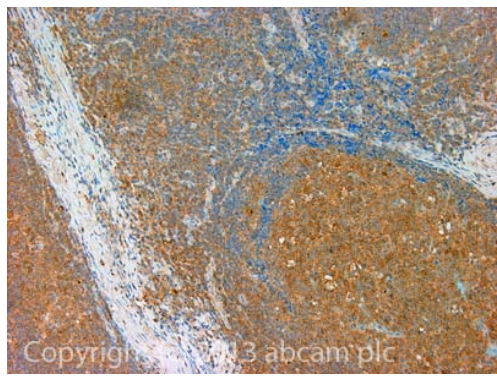
Developed using the ECL technique.

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

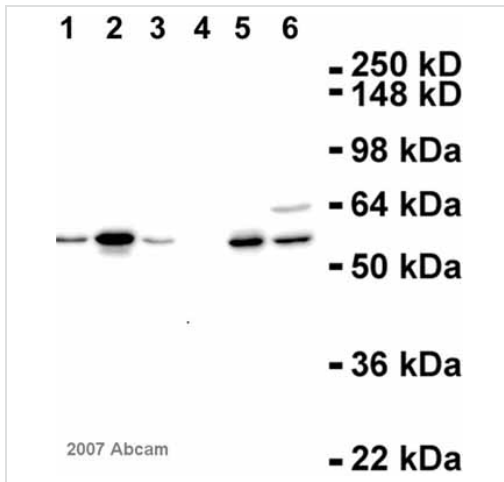
Lane 5: Control antibody IP

Lane 6: PC12 whole cell lysate at 10%

The Western Blot antibody was ab38 at 2µg/ml

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

All lanes :



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

All lanes : HRP conjugated goat anti-mouse at 1/5000 dilution

Performed under reducing conditions.

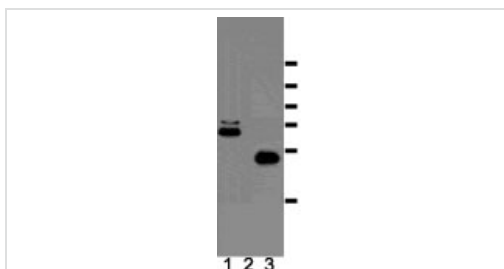
Predicted band size: 60 kDa

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

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.

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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