abcam

Product datasheet

Anti-Cyclin A2 antibody [E23.1] ab38

*** 10 Abreviews 57 References 4 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

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Chicken, Cow

Immunogen Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HEK293; U20S; PC12; NIH3T3. IHC-P: Human breast cancer tissue.

General notes

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Purity Protein G purified

Clonality Monoclonal

Clone number E23.1 Myeloma Sp2

1

Light chain type lgG2a kappa

Applications

The Abpromise guarantee 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	★★★★ <u>(1)</u>	Use a concentration of 5 µg/ml.
WB	★★★★☆ (3)	Use a concentration of 5 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 60 kDa).

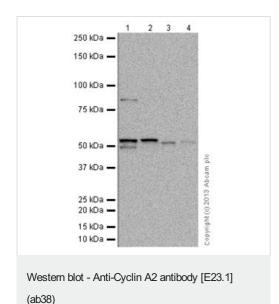
Target

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 stageAccumulates steadily during G2 and is abruptly destroyed at mitosis. **Cellular localization**Nucleus. Cytoplasm. Cytoplasmic when associated with SCAPER.

Images



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

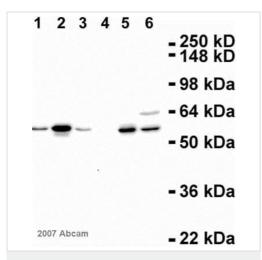
Negative control Gopyright (c) 2021 Abcom plc

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

Immunohistochemical anaylsis of Cyclin A2 staining in Human breast cancer 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 (EDTA based pH 9.0 solution, epitope retrieval solution 2) for 20 mins. The section was then incubated with ab38 (5 µg/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.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



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.

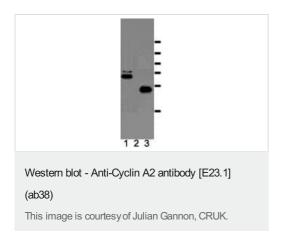
Predicted band size: 60 kDa **Observed band size:** 58 kDa

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 of Swiss 3T3 cells showing presence of cyclin A in rapidly dividing cells (1) but absent in quiesent cells (2). Recombinant cyclin A (3). Molecular weight markers 114, 98, 68, 57, 43 and 32 kD. Western Blot of Swiss 3T3 cells showing presence of cyclin A in rapidly dividing cells (1) but absent in quiesent cells (2). Recombinant cyclin A (3). Molecular weight markers 114, 98, 68, 57, 43 and 32 kD.

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