abcam

Product datasheet

Anti-Aurora A antibody [35C1] ab13824

★★★★★ 6 Abreviews 73 References 4 图像

概述

产品名称 Anti-Aurora A抗体[35C1]

描述 小鼠单克隆抗体[35C1] to Aurora A

宿主 Mouse

经测试应用 适用于: Flow Cyt (Intra), WB, ICC/IF

种属反应性 与反应: Human

预测可用于: Mouse 4

免疫原 Recombinant full length protein corresponding to Human Aurora A.

阳性对照 Human HeLa and mouse M-ICc12 cell lysates for Western blotting and human 293 or mouse

LLC1 cell lines for IF. Flow Cyt (Intra): HeLa cells. ICC: HeLa cells

常规说明 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

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.40

Preservative: 0.09% Sodium azide

Constituent: PBS

纯**度** Protein G purified

 克隆
 单克隆

 克隆编号
 35C1

1

骨髓瘤 Sp2/0-Ag14

同种型 lgG2b

应用

The Abpromise guarantee Abpromise™承诺保证使用ab13824于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		Use 2µg for 10 ⁶ cells. ab170192 - Mouse monoclonal lgG2b, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 46 kDa.
ICC/IF	*** <u>*</u>	Use a concentration of 5 µg/ml.

10m	1-	
4"	枛	

功能 Contributes to the regulation of cell cycle progression. Required for normal mitosis. Associates

with the centrosome and the spindle microtubules during mitosis and functions in centrosome maturation, spindle assembly, maintenance of spindle bipolarity, centrosome separation and mitotic checkpoint control. Phosphorylates numerous target proteins, including ARHGEF2, BRCA1, KIF2A, NDEL1, PARD3, PLK1 and BORA. Regulates KIF2A tubulin depolymerase activity (By similarity). Required for normal axon formation. Plays a role in microtubule remodeling

during neurite extension. Important for microtubule formation and/or stabilization.

组织特异性 Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly

expressed in colon, ovarian, prostate, neuroblastoma, breast and cervical cancer cell lines.

序列相似性 Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily.

Contains 1 protein kinase domain.

翻译后修饰 Activated by phosphorylation at Thr-288; this brings about a change in the conformation of the

activation segment. Phosphorylation at Thr-288 varies during the cell cycle and is highest during M phase. Autophosphorylated at Thr-288 upon TPX2 binding. Phosphorylated upon DNA

damage, probably by ATM or ATR.

Ubiquitinated by CHFR, leading to its degradation by the proteasome (By similarity).

Ubiquitinated by the anaphase-promoting complex (APC), leading to its degradation by the

proteasome.

细胞定位 Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > spindle pole. Detected at

the neurite hillock in developing neurons (By similarity). Localizes on centrosomes in interphase

cells and at each spindle pole in mitosis.

图片



Western blot - Anti-Aurora A antibody [35C1] (ab13824)

All lanes: Anti-Aurora A antibody [35C1] (ab13824) at 5 μg/ml

Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 2: HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

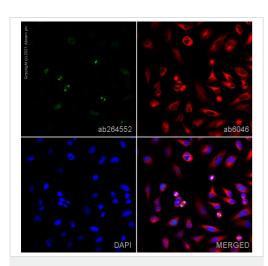
Predicted band size: 46 kDa **Observed band size:** 50 kDa

Additional bands at: 125 kDa (possible non-specific binding), 55

kDa (possible non-specific binding)

Exposure time: 20 minutes

This blot was produced using 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200v for 50 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab13824 over night at 4°C. Antibody binding was detected using an anti-mouse antibody conjugated to HRP, and visualised using ECL development solution.



Immunocytochemistry/ Immunofluorescence - Anti-Aurora A antibody [35C1] (ab13824)

This data was developed using the same antibody clone in a different buffer formulation without PBS and sodium azide (ab264552)

<u>ab264552</u> staining Aurora A in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with <u>ab264552</u> at 5μg/ml and <u>ab6046</u>, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with <u>ab150117</u>, Goat polyclonal Secondary Antibody to Mouse lgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 dilution (shown in green) and <u>ab150080</u>, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor[®] 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.

Interphase (pre duplication)

Interphase (post duplication)

Metaphase

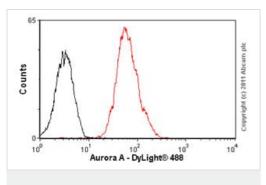
Telophase

Early G1
2007 Abcam

Immunocytochemistry/ Immunofluorescence - Anti-Aurora A antibody [35C1] (ab13824)

This image is courtesy of an Abreview submitted by Dr Kirk McManus

ab13824, at 1/2000 dilution, detecting Aurora A (green) in Hela Cells in conjunction with a Goat anti-mouse secondary antibody conjugated to Cy3[®]. Cells were fixed with methanol and counterstained with DAPI. Please refer to abreview for further details.



Flow Cytometry (Intracellular) - Anti-Aurora A antibody [35C1] (ab13824)

Overlay histogram showing HeLa cells stained with ab13824 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab13824, 2µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2b [PLPV219] (ab91366, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

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