# abcam

### Product datasheet

## Anti-Aurora A antibody [35C1] ab13824

★★★★★ 6 Abreviews 73 References 画像数 4

#### 製品の概要

免疫原

製品名 Anti-Aurora A antibody [35C1]

製品の詳細 Mouse monoclonal [35C1] to Aurora A

由来種 Mouse

アプリケーション 適用あり: Flow Cyt (Intra), WB, ICC/IF

種交差性 交差種: Human

交差が予測される動物種: Mouse Accombinant full length protein corresponding to Human Aurora A.

ポジティブ・コントロール 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

特記事項 This partitionally plane is many fact and by Absorpt Kyay magnitude a sur

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

#### 製品の特性

製品の状態 Liquid

保存方法 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.

**バッファー** pH: 7.40

Preservative: 0.09% Sodium azide

Constituent: PBS

精製度 Protein G purified

ポリ/モノ モノクローナル

**クローン名** 35C1

1

**₹I**□-₹ Sp2/0-Ag14

アイソタイプ lgG2b

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab13824の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use 2µg for 10 <sup>6</sup> cells.  ab170192 - Mouse monoclonal lgG2b, is suitable for use as an isotype control with this antibody.
WB	<b>★★★★</b> ★ ★ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 46 kDa.
ICC/IF	*** <u>*</u> (1)	Use a concentration of 5 µg/ml.

#### ターゲット情報

機能	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.

組織特異性 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.

配列類似性 Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily.

Contains 1 protein kinase domain.

翻訳後修飾 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

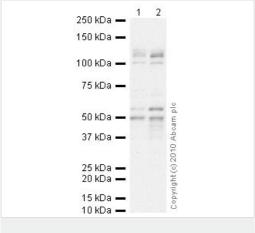
proteasome.

細胞内局在 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.

#### 画像



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.

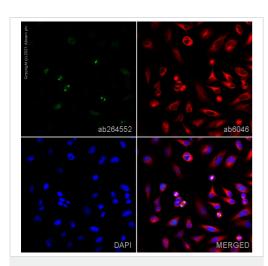
**Predicted band size:** 46 kDa **Observed band size:** 50 kDa

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<sup>®</sup> 488) preadsorbed at 1/1000 dilution (shown in green) and <u>ab150080</u>, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor<sup>®</sup> 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

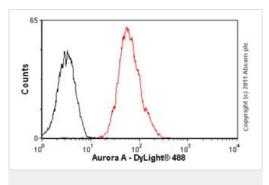
Telophase

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<sup>®</sup>. 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/1x10<sup>6</sup> 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/1x10<sup>6</sup> 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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