abcam

Product datasheet

Anti-Aurora A antibody [EPR5026] - Centrosome Marker ab108353



重组 RabMAb

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概述

产品名称 Anti-Aurora A抗体[EPR5026] - Centrosome Marker

描述 兔单克隆抗体[EPR5026] to Aurora A - Centrosome Marker

宿主 Rabbit

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

不适用于: IHC-P

种属反应性 与反应: Mouse, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: BXPC-3, LnCaP, SKBR-3 and HepG2 cell lysates. ICC/IF: HeLa cells.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

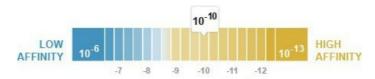
species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 2.63 \times 10^{-10} M$ 解离常数(KD)



Learn more about K_D

存储溶液 pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

纯**度** Protein A purified

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab108353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
WB		1/1000 - 1/10000. Predicted molecular weight: 46 kDa.
ICC/IF		1/100 - 1/250.
IP		1/60.
Flow Cyt (Intra)		1/1000 - 1/10000. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

应用说明 Is unsuitable for IHC-P.

靶标

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.

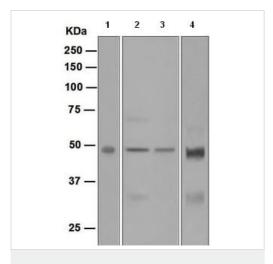
Ubiquitinated by CHFR, leading to its degradation by the proteasome (By similarity).

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



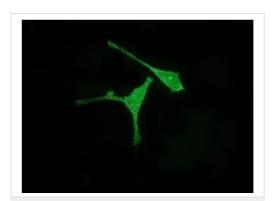
Western blot - Anti-Aurora A antibody [EPR5026] - Centrosome Marker (ab108353)

All lanes : Anti-Aurora A antibody [EPR5026] - Centrosome Marker (ab108353) at 1/1000 dilution

Lane 1: BXPC-3 cell lysate
Lane 2: LnCaP cell lysate
Lane 3: SKBR-3 cell lysate
Lane 4: HepG2 cell lysate

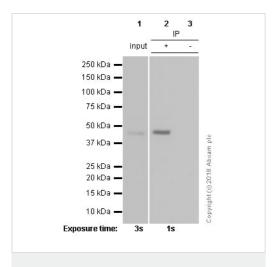
Lysates/proteins at 10 µg per lane.

Predicted band size: 46 kDa

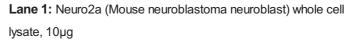


Immunocytochemistry/ Immunofluorescence - Anti-Aurora A antibody [EPR5026] - Centrosome Marker (ab108353)

Immunofluorescent staining of HeLa cells using ab108353 at 1/100



Immunoprecipitation - Anti-Aurora A antibody
[EPR5026] - Centrosome Marker (ab108353)



Lane 2: Neuro2a cell lysate 350µg and ab109518 2µg

Lane 3: Neuro2a cell lysate, $350\mu g$ and rabbit $lgG\left(\frac{ab172730}{}\right)$, $2\mu g$

Purified ab108353 immunoprecipitating Aurora A in Neuro2a cell lysates. Primary antibody was used at a 1/60 dilution (20 µg/ml). For western blotting, ab108353 at 1/500 and VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Blocking and diluting buffer used: 5% NFDM/TBST.



Immunoprecipitation - Anti-Aurora A antibody
[EPR5026] - Centrosome Marker (ab108353)

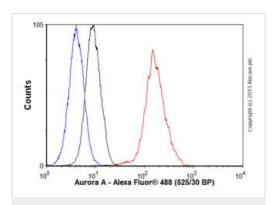
Lane 1: HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10µg

Lane 2: HepG2 cell lysate 350µg and ab109518 2µg

Lane 3: HepG2 cell lysate 350µg and rabbit lgG (ab172730), 2µg

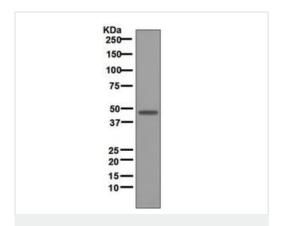
Purified ab108353 immunoprecipitating Aurora A in Neuro2a cell lysates. Primary antibody was used at a 1/60 dilution (20 μ g/ml). For western blotting, ab108353 at 1/500 and VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Blocking and diluting buffer used: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-Aurora A antibody [EPR5026] - Centrosome Marker (ab108353)

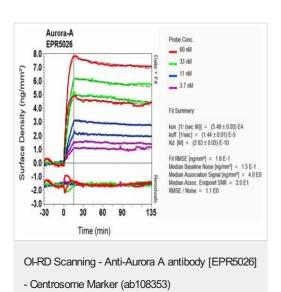
Overlay histogram showing HeLa cells stained with ab108353 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab108353, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor[®] 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-Aurora A antibody [EPR5026] - Centrosome Marker (ab108353)

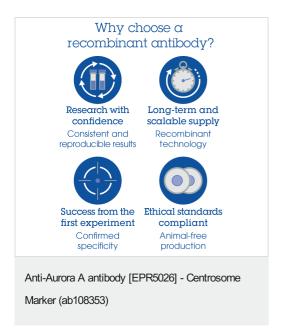
Anti-Aurora A antibody [EPR5026] - Centrosome Marker (ab108353) at 1/1000 dilution + Neuro-2a cell lysate at 10 µg

Predicted band size: 46 kDa



Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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