

**DATASHEET**
**Aurora A Mouse Monoclonal Antibody(C2541)**
**CAT. NO. AMA02153**
**KEY FEATURES**

Target	Aurora A	Source / Host	Mouse
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG2b. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

**BACKGROUND**

Mitotic serine/threonine kinase that contributes to the regulation of cell cycle progression . Associates with the centrosome and the spindle microtubules during mitosis and plays a critical role in various mitotic events including the establishment of mitotic spindle, centrosome duplication, centrosome separation as well as maturation, chromosomal alignment, spindle assembly checkpoint, and cytokinesis . Required for normal spindle positioning during mitosis and for the localization of NUMA1 and DCTN1 to the cell cortex during metaphase . Required for initial activation of CDK1 at centrosomes . Phosphorylates numerous target proteins, including ARHGEF2, BORA, BRCA1, CDC25B, DLGP5, HDAC6, KIF2A, LATS2, NDEL1, PARD3, PPP1R2, PLK1, RASSF1, TACC3, p53/TP53 and TPX2 .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:500
IF/ICC	1:100 - 1:500
FC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Mouse monoclonal to Aurora A
Specificity	Recognizes endogenous levels of Aurora A protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human Aurora A expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 46 kD; Observed: 46 kD
Form/Buffer	Mouse IgG2b. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	AIK; AIRK1; ARK1; AURA; AYK1; BTAK; IAK1; STK15; STK6; Aurora kinase A; Aurora 2; Aurora/IPL1-related kinase 1; ARK-1; Aurora-related kinase 1; hARK1; Breast tumor-amplified kinase; Serine/threonine-protein kinase 15; Serine/threonine-protein kinase 6; Serine/threonine-protein kinase aurora-A
Gene Symbol	AURKA
Entrez Gene	6790(Human)
SwissProt	O14965(Human)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

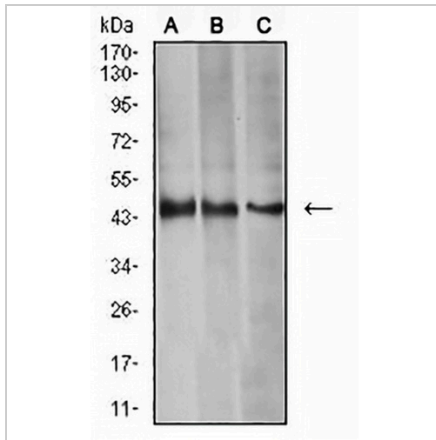
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

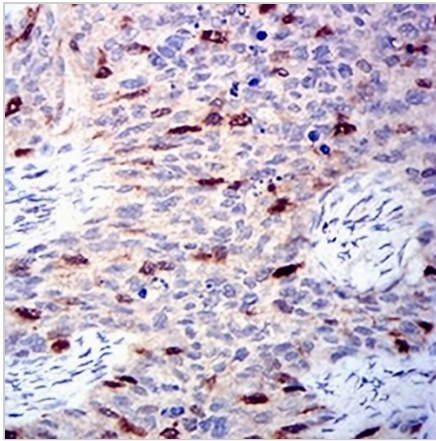
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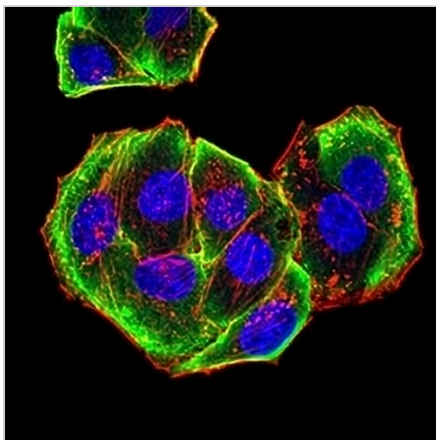
**DATA**



Western blot analysis of Aurora A expression in HEK293 (A), MCF7 (B), HeLa (C) whole cell lysates. (Predicted band size: 46 kD; Observed band size: 46 kD)



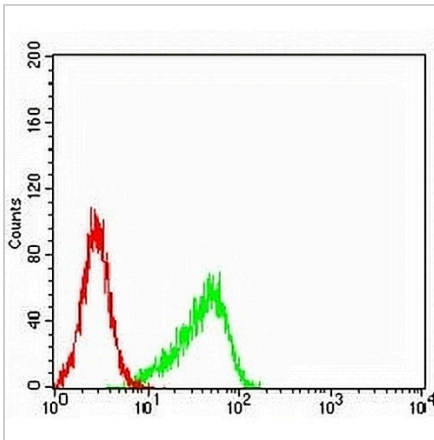
Immunohistochemical analysis of Aurora A staining in human cervical cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Aurora A staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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**DATA (CONTINUED)**

Flow cytometric analysis of HeLa cells using Anti-Aurora A Antibody (green) and negative control (red).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.