

Datasheet: MCA2249

**BATCH NUMBER 1707**

<b>Description:</b>	MOUSE ANTI AURORA-A KINASE
<b>Specificity:</b>	AURORA-A KINASE
<b>Other names:</b>	SERINE/THREONINE KINASE 15
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	35C1
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	0.1 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/500 - 1/1000
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own systems using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Mouse</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant Aurora-A
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O14965</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">6790</a>    AURKA    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	AIK, ARK1, AURA, BTAK, STK15, STK6
<b>RRID</b>	AB_567387
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c were fused with cells of the SP2/0-Ag14 mouse myeloma cell line
<b>Specificity</b>	<p><b>Mouse anri Human Aurora -A kinase monoclonal antibody, clone 35C1</b> recognizes human Aurora-A kinase also known as Aurora 2, breast tumor-amplified kinase and serine/threonine-protein kinase 6 or 15. Aurora kinase A is member of the Ser/Thr protein kinase family containing a single <a href="#">protein kinase domain</a>, has a molecular weight of ~46kDa and is involved in mitotic spindle assembly (<a href="#">Ducat et al. 2004</a>).</p> <p>Aurora-A kinase is reported to be overexpressed in many epithelial cancers and is thought to play an important role in tumorigenesis (<a href="#">Katayama et al. 2003</a>). Aurora A kinase appears to facilitate phosphorylation of centrin and co-localizes with it at centrosomes with maximum expression through prophase to late metaphase (<a href="#">Lukasiewicz et al. 2011</a>).</p> <p>Mouse anti human Aurora-A kinase, clone 35C1 recognizes an epitope within the non-catalytic N-terminal domain of Aurora-A. Clone 35C1 does not inhibit Aurora-A kinase activity (<a href="#">Cremet et al. 2003</a>).</p>
<b>Histology Positive Control Tissue</b>	Human 293 and mouse LLC1 cell lines.
<b>Western Blotting</b>	MCA2249 detects a band of approximately 46kDa in human HeLa and mouse M-ICc12 cell lysates.

## References

1. Cremet, J.Y. *et al.* (2003) Preparation and characterization of a human aurora-A kinase monoclonal antibody. [Mol Cell Biochem. 243 \(1-2\): 123-31.](#)
2. Hartsink-Segers SA *et al.* (2013) Inhibiting Polo-like kinase 1 causes growth reduction and apoptosis in pediatric acute lymphoblastic leukemia cells. [Haematologica. 98 \(10\): 1539-46.](#)
3. Hartsink-Segers, S.A. *et al.* (2013) Aurora kinases in childhood acute leukemia: the promise of aurora B as therapeutic target. [Leukemia. 27: 560-8.](#)
4. Lukasiewicz, K.B. *et al.* (2011) Control of centrin stability by Aurora A. [PLoS One. 6: e21291.](#)
5. Douglas, P. *et al.* (2015) Phosphorylation of SAF-A/hnRNP-U Serine 59 by Polo-Like Kinase 1 Is Required for Mitosis. [Mol Cell Biol. 35 \(15\): 2699-713.](#)

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## Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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## Guarantee

18 months from date of despatch.

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## Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2249>  
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## Regulatory

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

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