

Datasheet: MCA2249

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

	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.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein	IgG concentration 1.0 mg/ml

Concentrations

Immunogen Recombinant Aurora-A

External Database Links

UniProt:

[O14965](#) [Related reagents](#)

Entrez Gene:

[6790](#) AURKA [Related reagents](#)

Synonyms AIK, ARK1, AURA, BTAK, STK15, STK6

Fusion Partners Spleen cells from immunised Balb/c were fused with cells of the SP2/0-Ag14 mouse myeloma cell line

Specificity **Mouse anti Human Aurora -A kinase monoclonal antibody, clone 35C1** 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 [protein kinase domain](#), has a molecular weight of ~46kDa and is involved in mitotic spindle assembly ([Ducat et al. 2004](#)).

Aurora-A kinase is reported to be overexpressed in many epithelial cancers and is thought to play an important role in tumourigenesis ([Katayama et al. 2003](#)). Aurora A kinase appears to facilitate phosphorylation of centrin and co-localizes with it at centrosomes with maximum expression through prophase to late metaphase ([Lukasiewicz et al. 2011](#)).

Mouse anti human Aurora-A kinase, clone 35C1 specifically recognizes an epitope within the non-catalytic N-terminal domain of Aurora-A. Clone 35C1 does not inhibit Aurora-A kinase activity ([Cremet et al. 2003](#)).

Histology Positive Control Tissue

Human 293 and mouse LLC1 cell lines.

Western Blotting 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.](#)

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.

Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG2b (HCA038...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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