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 product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN_3)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant Aurora-A
External Database Links	**UniProt:** O14965 Related reagents **Entrez Gene:** 6790 AURKA Related reagents
Synonyms	AIK, ARK1, AURA, BTAK, STK15, STK6
RRID	AB_567387
Fusion Partners	Spleen cells from immunized Balb/c were fused with cells of the SP2/0-Ag14 mouse myeloma cell line
Specificity	**Mouse anri 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 tumorigenesis (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 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	Mouse anti aurora-A kinase antibody, clone 35C1 detects a band of approximately 46kDa in human HeLa and mouse M-ICc12 cell lysates.
References	1. Lukasiewicz, K.B. *et al.* (2011) Control of centrin stability by Aurora A. PLoS One. 6: e21291. 2. 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. 3. 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.

4. 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.
5. Douglas, P. *et al.* (2020) Nocodazole-Induced Expression and Phosphorylation of Anillin and Other Mitotic Proteins Are Decreased in DNA-Dependent Protein Kinase Catalytic Subunit-Deficient Cells and Rescued by Inhibition of the Anaphase-Promoting Complex/Cyclosome with proTAME but Not Apcin. Mol Cell Biol. 40 (13): e00191-19.

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2249 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

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