

## Datasheet: MCA2679

<b>Description:</b>	MOUSE ANTI HUMAN BUB1
<b>Specificity:</b>	BUB1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	14H5
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	50 µg

## 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	▪			1/200
Western Blotting	▪			1/500 - 1/2000
Immunofluorescence (1)	▪			1/500 - 1/2000
Functional Assays			▪	

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.

**(1) Use cells grown on cover slips fixed with 3.5% paraformaldehyde in PBS at pH6.8, or 100% methanol at -20°C. Permeabilise cells with 0.5% Triton X-100.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.01% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Recombinant protein corresponding to amino acids 281-419 of human Bub1 protein.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O43683</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">699</a>    BUB1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	BUB1L
<b>RRID</b>	AB_2228123
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human BUB1 antibody, clone 14H5</b> detects Bub1, a protein kinase involved in spindle checkpoint function during mitosis. Bub1 co-operates with Aurora B kinase to inhibit Cdc20-mediated activation of the anaphase promoting complex/cyclosome (APC/C) until all the chromosomes correctly align on the microtubule spindle apparatus via their kinetochores, thus ensuring high fidelity mitotic chromosome segregation.</p> <p>Bub1 is also required for assembly of a functional inner centromere, sister chromatid cohesion via targeting of the Shugoshin protein, and metaphase congression. Mutation or aberrant Bub1 expression is associated with chromosomal instability, aneuploidy, and human cancer.</p>
<b>Western Blotting</b>	MCA2679 detects a band of approximately 160kDa in HeLa cell lysates.
<b>Further Reading</b>	<ol style="list-style-type: none"> <li>Morrow, C.J. <i>et al.</i> (2005) Bub1 and aurora B cooperate to maintain BubR1-mediated inhibition of APC/CCdc20. <a href="#">J Cell Sci. 118 (Pt 16): 3639-52.</a></li> <li>Meraldi, P. &amp; Sorger, P.K. (2005) A dual role for Bub1 in the spindle checkpoint and chromosome congression. <a href="#">EMBO J. 24 (8): 1621-33.</a></li> <li>Vanoosthuyse, V. &amp; Hardwick, K.G. (2005) Bub1 and the multilayered inhibition of Cdc20-APC/C in mitosis. <a href="#">Trends Cell Biol. 15 (5): 231-3.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	18 months from date of despatch.

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**Health And Safety Information**      Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...)                      [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...)                      [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...)                      [DyLight@800](#)  
Rabbit Anti Mouse IgG (STAR13...)                      [HRP](#)  
Goat Anti Mouse IgG (STAR76...)                      [RPE](#)  
Goat Anti Mouse IgG (STAR70...)                      [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...)                      [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...)                      [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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Look out for updates on how to access your digital version at [bio-rad-antibodies.com](http://bio-rad-antibodies.com)

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