

# Datasheet: MCA1860

**BATCH NUMBER 164919**

<b>Description:</b>	MOUSE ANTI HUMAN Mcm5
<b>Specificity:</b>	MCM5
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CRCT5.1
<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 (1)	▪			1/25 - 1/100
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			

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) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<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</b>	0.09% sodium azide (NaN <sub>3</sub> )

<b>Stabilisers</b>	
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Bacterially expressed human Mcm5.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P33992</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4174</a>    MCM5    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CDC46
<b>RRID</b>	AB_2235163
<b>Fusion Partners</b>	Spleen cells from immunized CBI/CFI mice were fused with cells of the mouse SP2 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Mcm5 antibody, clone CRCT5.1</b> recognizes human Mcm-5 (minichromosome maintenance protein 5), also known as DNA replication licensing factor MCM5 or P1-CDC46. Mcm5 is a nuclear protein of ~95kDa with an important role in the control of DNA replication (<a href="#">Snyder <i>et al.</i> 2005</a>).</p> <p>Immunocytochemical assessment of Mcm5 expression may be of value in improving the accuracy of cervical smear testing for the detection of malignancy (<a href="#">Murphy <i>et al.</i> 2004</a>).</p>
<b>Histology Positive Control Tissue</b>	Human tonsil or cervical carcinoma
<b>References</b>	<ol style="list-style-type: none"> <li>1. Dart, D.A. <i>et al.</i> (2004) Recruitment of the cell cycle checkpoint kinase ATR to chromatin during S-phase. <a href="#">J Biol Chem. 279: 16433-40.</a></li> <li>2. Guida, T. <i>et al.</i> (2005) Mitogenic effects of the up-regulation of minichromosome maintenance proteins in anaplastic thyroid carcinoma. <a href="#">J Clin Endocrinol Metab. 90: 4703-9.</a></li> <li>3. Adams, K.E. <i>et al.</i> (2006) Recruitment of ATR to sites of ionising radiation-induced DNA damage requires ATM and components of the MRN protein complex. <a href="#">Oncogene. 25: 3894-904.</a></li> <li>4. Gakiopoulou, H. <i>et al.</i> (2007) Minichromosome maintenance proteins 2 and 5 in non-benign epithelial ovarian tumours: relationship with cell cycle regulators and prognostic implications. <a href="#">British Journal of Cancer 97: 1124-34.</a></li> <li>5. Polo, S.E. <i>et al.</i> (2010) Clinical significance and prognostic value of chromatin assembly factor-1 overexpression in human solid tumours. <a href="#">Histopathology. 57: 716-24.</a></li> </ol>
<b>Further Reading</b>	1. Williams, G.H. <i>et al.</i> (1998) Improved cervical smear assessment using antibodies

against proteins that regulate DNA replication. [Proc Natl Acad Sci U S A. 95 \(25\): 14932-7.](#)

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<b>Storage</b>	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.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1860">https://www.bio-rad-antibodies.com/SDS/MCA1860</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <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 (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
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