

# Datasheet: MCA1860T BATCH NUMBER 166575

Description:	MOUSE ANTI HUMAN Mcm5	
Specificity:	MCM5	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	CRCT5.1	
Isotype:	lgG2b	
Quantity:	20 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	NO	Not Determined	Suggested Dilution
Flow Cytometry				
Immunohistology - Frozen				
Immunohistology - Paraffin (1)	•			1/50 - 1/ 1000

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.

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 <sub>3</sub> )
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml		
Immunogen	Bacterially expressed human Mcm5.		
External Database Links	UniProt: P33992 Related reagents  Entrez Gene:		
	4174 MCM5 Related reagents		
Synonyms	CDC46		
RRID	AB_2142421		
Fusion Partners	Spleen cells from immunized CBI/CFI mice were fused with cells of the mouse SP2 myeloma cell line.		
Specificity	Mouse anti Human Mcm5 antibody, clone CRCT5.1 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 (Snyder et al. 2005).		
	Immunocytochemical assessment of Mcm5 expression may be of value in improving the accuracy of cervical smear testing for the detection of malignancy (Murphy et al. 2004).		
Histology Positive Control Tissue	Human tonsil or cervical carcinoma		
References	<ol> <li>Dart, D.A. <i>et al.</i> (2004) Recruitment of the cell cycle checkpoint kinase ATR to chromatin during S-phase. <u>J Biol Chem. 279: 16433-40.</u></li> <li>Guida, T. <i>et al.</i> (2005) Mitogenic effects of the up-regulation of minichromosome maintenance proteins in anaplastic thyroid carcinoma. <u>J Clin Endocrinol Metab. 90: 4703-9.</u></li> <li>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. <u>Oncogene. 25: 3894–904.</u></li> <li>Gakiopoulou, H. <i>et al.</i> (2007) Minichromosome maintenance proteins 2 and 5 in</li> </ol>		
	non-benign epithelial ovarian tumours: relationship with cell cycle regulators and prognostic implications. British Journal of Cancer 97: 1124–34.  5. Polo, S.E. et al. (2010) Clinical significance and prognostic value of chromatin assembly factor-1 overexpression in human solid tumours. Histopathology. 57: 716-24.		
Further Reading	1. Williams, G.H. <i>et al.</i> (1998) Improved cervical smear assessment using antibodies against proteins that regulate DNA replication. <u>Proc Natl Acad Sci U S A. 95 (25):</u> 14932-7.		
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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1860T">https://www.bio-rad-antibodies.com/SDS/MCA1860T</a> 10040
Regulatory	For research purposes only

## Related Products

### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...)

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 (Fc) (STAR120...) FITC, HRP

**Recommended Negative Controls** 

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

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America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_uk@bio-rad.com

Email: antibody\_sales\_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M411878:221108'

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