

Datasheet: MCA1860

BATCH NUMBER 164919

Description:	MOUSE ANTI HUMAN Mcm5
Specificity:	MCM5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CRCT5.1
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 (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.

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	0.09% sodium azide (NaN ₃)

Stabilisers

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_2235163

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

1. Dart, D.A. *et al.* (2004) Recruitment of the cell cycle checkpoint kinase ATR to chromatin during S-phase. [J Biol Chem. 279: 16433-40.](#)
 2. Guida, T. *et al.* (2005) Mitogenic effects of the up-regulation of minichromosome maintenance proteins in anaplastic thyroid carcinoma. [J Clin Endocrinol Metab. 90: 4703-9.](#)
 3. Adams, K.E. *et al.* (2006) Recruitment of ATR to sites of ionising radiation-induced DNA damage requires ATM and components of the MRN protein complex. [Oncogene. 25: 3894-904.](#)
 4. Gakiopoulou, H. *et al.* (2007) Minichromosome maintenance proteins 2 and 5 in 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.](#)
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Further Reading

1. Williams, G.H. *et al.* (1998) Improved cervical smear assessment using antibodies

against proteins that regulate DNA replication. [Proc Natl Acad Sci U S A. 95 \(25\): 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: <https://www.bio-rad-antibodies.com/SDS/MCA1860>
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...) [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 (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

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