

Datasheet: MCA1860

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 antibody 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 antibody 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 G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
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

Fusion Partners

Spleen cells from immunised 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](#)).

It has been reported that 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**

Tonsil / 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. 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.](#)
3. 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.](#)
4. 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.](#)
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. *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

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

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

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG2b (HCA038...)	FITC , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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