

## Datasheet: MCA1558

<b>Description:</b>	MOUSE ANTI PCNA
<b>Specificity:</b>	PCNA
<b>Other names:</b>	PROLIFERATING CELL NUCLEAR ANTIGEN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	PC10
<b>Isotype:</b>	IgG2a
<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 (1)	▪			1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			1/50 - 1/100
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			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) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

<b>Target Species</b>	Rat
<b>Species Cross Reactivity</b>	<p>Reacts with: Ferret, Chicken, Rabbit, Xenopus, Mouse, Horse, Sheep, Dog, Cat, Cynomolgus monkey, Rhesus Monkey, Hamster, Atlantic Salmon, Human, Bearded Dragon, Corn Snake, Nile Crocodile</p> <p>Based on sequence similarity, is expected to react with: Vertebrates, Invertebrates</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>

<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Antibody purified from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Rat PCNA made in the protein A expression vector pR1T2T
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P04961</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">25737</a> Pcna    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_324955
<b>Specificity</b>	<p><b>Mouse anti PCNA antibody, clone PC10</b> recognizes the proliferating cell nuclear antigen, also known as PCNA or cyclin. PCNA is a 261 amino acid ~28 kDa nuclear protein vital for cellular DNA synthesis at the replication fork (<a href="#">Li et al. 1995</a>) through its interaction with <a href="#">FEN1</a> (<a href="#">Wu et al. 1996</a>). PCNA is the auxilliary protein for DNA polymerase <math>\delta</math> (<a href="#">Bravo et al. 1987</a>).</p> <p>PCNA is highly conserved between mammalian species and other vertebrates. Mouse anti PCNA antibody, clone PC10 has been used for the detection of PCNA in a number of species including human, rat, mouse (<a href="#">Park et al. 2008</a>), chicken (<a href="#">Franz-Odendaal 2008</a>) and abalone (<a href="#">Harris et al. 2006</a>).</p>
<b>Flow Cytometry</b>	Use 10 $\mu$ l of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100 $\mu$ l
<b>Histology Positive Control Tissue</b>	Tonsil
<b>References</b>	<ol style="list-style-type: none"> <li>1. Waseem, N.H. &amp; Lane, D.P. (1990) Monoclonal antibody analysis of the proliferating cell nuclear antigen (PCNA). Structural conservation and the detection of a nucleolar form. <a href="#">J Cell Sci. 96 ( Pt 1): 121-9.</a></li> <li>2. Landberg, G. et al. (1990) Flow cytometric multiparameter analysis of proliferating cell nuclear antigen/cyclin and Ki-67 antigen: a new view of the cell cycle. <a href="#">Exp Cell Res. 187 (1): 111-8.</a></li> <li>3. Wilson, G.D. et al. (1992) Flow cytometric characterisation of proliferating cell nuclear antigen using the monoclonal antibody PC10. <a href="#">Eur J Cancer. 28A (12): 2010-7.</a></li> </ol>

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**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.

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<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1558">https://www.bio-rad-antibodies.com/SDS/MCA1558</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</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 (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA1210\)](#)

<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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Printed on 29 Feb 2024