Datasheet: MCA1558F

BATCH NUMBER 151275

Description:	MOUSE ANTI PCNA:FITC
Specificity:	PCNA
Other names:	PROLIFERATING CELL NUCLEAR ANTIGEN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	PC10
Isotype:	IgG2a
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 (1)	▪			Neat - 1/10

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) **Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code BUF09) for this purpose.**

Target Species

Rat

Species Cross Reactivity

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

Based on sequence similarity, is expected to react with:Vertebrates, Invertebrates

N.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.

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)

	FITC	490	525

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 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Rat PCNA made in the protein A expression vector pR1T2T
External Database Links	**UniProt:** P04961 Related reagents **Entrez Gene:** 25737 Pcna Related reagents
RRID	AB_324957
Specificity	**Mouse anti PCNA antibody, clone PC10** 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 (Li *et al.* 1995) through its interaction with FEN1 (Wu *et al.* 1996). PCNA is the auxilliary protein for DNA polymerase δ (Bravo *et al.* 1987). 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 (Park *et al.* 2008), chicken (Franz-Odendaal 2008) and abalone (Harris *et al.* 2006).
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.
References	1. Mathews, M.B. *et al.* (1984) Identity of the proliferating cell nuclear antigen and cyclin. Nature. 309 (5966): 374-6. 2. Ogata, K. *et al.* (1985) Purification and N-terminal amino acid sequence of proliferating cell nuclear antigen (PCNA)/cyclin and development of ELISA for anti-PCNA antibodies. J Immunol. 135 (4): 2623-7. 3. Jenkins, H. *et al.* (1993) Nuclei that lack a lamina accumulate karyophilic proteins and assemble a nuclear matrix. J Cell Sci. 106: 275-85. 4. 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. Exp Cell Res. 187 (1): 111-8. 5. Wilson, G.D. *et al.* (1992) Flow cytometric characterisation of proliferating cell nuclear

antigen using the monoclonal antibody PC10. Eur J Cancer. 28A (12): 2010-7.
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18. Khlebnikov, V. V. *et al.* (2015) Developmental Characteristics of the Hypothalamo-Hypophyseal-Adrenal System in Chronic Heterotypical Stress Neuroscience and Behavioral Physiology. 46 (1): 100-5.
19. Nakatsuka, M. & Kumabe, S (2018) Histological Alterations from Condyle Repositioning with Functional Appliances in Rats. J Clin Pediatr Dent. 42 (5): 391-7.

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. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety

Material Safety Datasheet documentation #10041 available at:

Information	https://www.bio-rad-antibodies.com/SDS/MCA1558F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA1210F)

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

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

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