

## Datasheet: MCA1558P

Description:	MOUSE ANTI PCNA:HRP
Specificity:	PCNA
Other names:	PROLIFERATING CELL NUCLEAR ANTIGEN
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	PC10
lsotype:	lgG2a
Quantity:	0.1 mg

## **Product Details**

Applications	This product has been re derived from testing withi communications from the	n our labo originato	oratories, ors. Please	peer-reviewed publica e refer to references in	tions or personal dicated for further	
	information. For general ا		ecommen	dations, please visit <u>w</u>	<u>ww.bio-</u>	
	rad-antibodies.com/proto					
		Yes	No	Not Determined	Suggested Dilution	
	Immunohistology - Frozen					
	Immunohistology - Paraffin			•		
	ELISA			•		
	Western Blotting				1/1000	
	Where this product has n	ot been t	ested for	use in a particular tech	nique this does not	
	necessarily exclude its us	se in such	n procedu	res. Suggested workin	g dilutions are given as	
	a guide only. It is recomm	nended th	at the use	er titrates the product f	or use in their own	
	system using appropriate negative/positive controls.					
Target Species	Rat					
Species Cross Reactivity	Reacts with: Ferret, Chicl Cynomolgus monkey, Rh Dragon, Corn Snake, Nike Based on sequence simil <b>N.B.</b> Antibody reactivity a reactivity is derived from personal communications further information.	esus Mor e Crocodi arity, is e: and workin testing wi	nkey, Ham le xpected to ng condition ithin our la	nster, Atlantic Salmon, o react with:Vertebrate ons may vary between aboratories, peer-revie	Human, Bearded s, Invertebrates species. Cross wed publications or	
Product Form	Purified IgG conjugated t	o Horsera	adish Pero	oxidase (HRP) - liquid		
Preparation						

	supernatant	
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.01% Thiomersal HRP Stabiliser ( <u>BUF052A</u> )	
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml	
Immunogen	Rat PCNA made in the protein A expression vector pR1T2T	
External Database Links	UniProt: <u>P04961</u> <u>Related reagents</u> Entrez Gene: <u>25737</u> Pcna <u>Related reagents</u>	
Specificity	<b>Mouse anti PCNA antibody, clone PC10</b> recognizes the proliferating cell nucle antigen, also known as PCNA or cyclin. PCNA is a 261 amino acid ~28 kDa nucle protein vital for cellular DNA synthesis at the replication fork ( <u>Li <i>et al.</i> 1995</u> ) thro interaction with <u>FEN1</u> ( <u>Wu <i>et al.</i> 1996</u> ). PCNA is the auxilliary protein for DNA p $\delta$ ( <u>Bravo <i>et al.</i> 1987</u> ). PCNA is highly conserved between mammalian species and other vertebrates. PCNA antibody, clone PC10 has been used for the detection of PCNA in a num species including human, rat, mouse ( <u>Park <i>et al.</i> 2008</u> ), chicken ( <u>Franz-Odenda</u> and abalone ( <u>Harris <i>et al.</i> 2006</u> ).	clear ugh its olymerase Mouse anti ber of
References	<ol> <li>Waseem, N.H. &amp; Lane, D.P. (1990) Monoclonal antibody analysis of the prolif cell nuclear antigen (PCNA). Structural conservation and the detection of a nucl <u>J Cell Sci. 96 (Pt 1): 121-9.</u></li> <li>Landberg, G. <i>et al.</i> (1990) Flow cytometric multiparameter analysis of prolifer nuclear antigen/cyclin and Ki-67 antigen: a new view of the cell cycle. <u>Exp Cell J</u> (<u>1): 111-8.</u></li> <li>Wilson, G.D. <i>et al.</i> (1992) Flow cytometric characterisation of proliferating cel antigen using the monoclonal antibody PC10. <u>Eur J Cancer. 28A (12): 2010-7.</u></li> <li>Jenkins, H. <i>et al.</i> (1993) Nuclei that lack a lamina accumulate karyophilic prof assemble a nuclear matrix. <u>J Cell Sci. 106: 275-85.</u></li> <li>Prosperi, E. <i>et al.</i> (1993) Proliferating cell nuclear antigen complex formation by ultraviolet irradiation in human quiescent fibroblasts as detected by immunos and flow cytometry. <u>Exp Cell Res. 205 (2): 320-5.</u></li> <li>Elsässer, H.P. <i>et al.</i> (1994) Growth of rat pancreatic acinar cells quantitated w monoclonal antibody against the proliferating cell nuclear antigen. <u>Cell Tissue R</u> (<u>3): 603-9.</u></li> <li>Buggins, A.G. <i>et al.</i> (2001) Microenvironment produced by acute myeloid leud prevents T cell activation and proliferation by inhibition of NF-kappaB, c-Myc, ar</li> </ol>	eolar form. ating cell <u>Res. 187</u> I nuclear teins and induced taining vith a <u>tes. 276</u> kemia cells

pathways. J Immunol. 167: 6021-30.

		8. Fenton, M. <i>et al.</i> (2001) Cellular senescence after single and repeated balloon catheter denudations of rabbit carotid arteries. Arterioscler Thromb Vasc Biol. 21: 220-6.
		9. Harris, L. <i>et al.</i> (2006) Characterisation of cell types in abalone ( <i>Haliotis</i> spp.) tissues
		using immunohistochemical techniques <u>Aquaculture 261: 1413-21</u>
		10. Park, J.H. <i>et al.</i> (2008) Gastric lesions and immune responses caused by long-term
		infection with Helicobacter heilmannii in C57BL/6 mice. J Comp Pathol. 139: 208-17.
		11. Franz-Odendaal, T.A. (2008) Toward understanding the development of scleral
		ossicles in the chicken, <i>Gallus gallus</i> . <u>Dev Dyn. 237: 3240-51.</u>
		12. Kapitonova, M.Y. <i>et al.</i> (2010) Immunohistochemical characteristics of the hypophysis
		in normal conditions and chronic stress. <u>Neurosci Behav Physiol. 40: 97-102.</u>
		13. Hashimoto, Y. et al. (2010) Rad51 protects nascent DNA from Mre11-dependent
		degradation and promotes continuous DNA synthesis. Nat Struct Mol Biol. 17: 1305-11.
		14. Izhak, L. et al. (2012) Dissecting the autocrine and paracrine roles of the CCR2-CCL2
		axis in tumor survival and angiogenesis. <u>PLoS One. 7: e28305.</u>
		15. Khlebnikov, V.V. et al. (2015) Developmental Characteristics of the Hypothalamo-
		Hypophyseal-Adrenal System in Chronic Heterotypical Stress <u>Neuroscience and</u>
		Behavioral Physiology. 46 (1): 100-5.
		16. Guzera, M. et al. (2016) In Vitro Influence of Mycophenolic Acid on Selected
		Parameters of Stimulated Peripheral Canine Lymphocytes. PLoS One. 11 (5): e0154429.
		17. DI-poi, N. & Millinkovitch, M.C. (2010) The anatomical placode in replie scale
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