

Datasheet: MCA967

**BATCH NUMBER 180220**

<b>Description:</b>	MOUSE ANTI RAT GRANULOCYTES AND ERYTHROID CELLS
<b>Specificity:</b>	GRANULOCYTES
<b>Format:</b>	S/N
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	HIS48
<b>Isotype:</b>	IgM
<b>Quantity:</b>	2 ml

## 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	▪			neat
Immunohistology - Frozen (1)	▪			1/20
Immunohistology - Paraffin (2)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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) **The epitope recognised by this antibody is reported to be sensitive to routine formaldehyde-based fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

(2) **The epitope recognised by this antibody is reported to be sensitive to routine formaldehyde-based fixation and tissue processing. Bio-Rad recommends PLP fixation for paraffin sections. See [Whiteland et al., 1995](#) and [Banerjee et al., 2003](#) for details.**

<b>Target Species</b>	Rat
<b>Product Form</b>	Tissue Culture Supernatant - liquid

<b>Preparation</b>	Tissue Culture Supernatant containing 0.2M Tris/HCl pH7.4 and 8% foetal calf serum
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Immunogen</b>	PVG rat spleen cell suspension.
<b>RRID</b>	AB_322077
<b>Specificity</b>	<p><b>Mouse anti Rat granulocytes and erythroid cells antibody, clone HIS48</b> recognizes granulocytes and erythroid cells.</p> <p>Mouse anti Rat granulocytes and erythroid cells antibody, clone HIS48 has frequently been used to stain rat neutrophils in immunohistochemistry (<a href="#">Reckless et al. 2001</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to stain 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>van Goor, H. <i>et al.</i> (1991) Determinants of focal and segmental glomerulosclerosis in the rat after renal ablation. Evidence for involvement of macrophages and lipids. <a href="#">Lab Invest. 64 (6): 754-65.</a></li> <li>Reckless, J. <i>et al.</i> (2001) The pan-chemokine inhibitor NR58-3.14.3 abolishes tumour necrosis factor-alpha accumulation and leucocyte recruitment induced by lipopolysaccharide in vivo. <a href="#">Immunology. 103 (2): 244-54.</a></li> <li>Dimitrijević, M. <i>et al.</i> (2010) Modulation of granulocyte functions by peptide YY in the rat: age-related differences in Y receptors expression and plasma dipeptidyl peptidase 4 activity. <a href="#">Regul Pept. 159: 100-9.</a></li> <li>Howard, K.M. <i>et al.</i> (2009) Differential expression of platelet-activating factor acetylhydrolase in lung macrophages. <a href="#">Am J Physiol Lung Cell Mol Physiol. 297: L1141-50.</a></li> <li>Trinh, L. <i>et al.</i> (2008) The corneal endothelium in an endotoxin-induced uveitis model: correlation between in vivo confocal microscopy and immunohistochemistry. <a href="#">Mol Vis. 14: 1149-56.</a></li> <li>Narita, T. <i>et al.</i> (2012) The use of cell-sheet technique eliminates arrhythmogenicity of skeletal myoblast-based therapy to the heart with enhanced therapeutic effects. <a href="#">Int J Cardiol. pii: S0167-5273(12)01187-4.</a></li> <li>Foucher, P. <i>et al.</i> (1999) Antimyeloperoxidase-associated Lung Disease An Experimental Model <a href="#">Am J Respir Crit Care Med. 160: 987-94.</a></li> <li>Della Coletta Francescato, H. <i>et al.</i> (2011) Inhibition of hydrogen sulphide formation reduces cisplatin-induced renal damage. <a href="#">Nephrol Dial Transplant. 26: 479-88.</a></li> <li>Gering, K.M. <i>et al.</i> (2006) The interaction mode of premalignant Schwann and immune effector cells during chemically induced carcinogenesis in the rat peripheral nervous system is strongly influenced by genetic background. <a href="#">Cancer Res. 66: 4708-14.</a></li> <li>Homo-Delarche, F. <i>et al.</i> (2006) Islet inflammation and fibrosis in a spontaneous model of type 2 diabetes, the GK rat. <a href="#">Diabetes. 55: 1625-33.</a></li> <li>Panichi, V. <i>et al.</i> (2001) Effects of 1,25(OH)2D3 in experimental mesangial proliferative nephritis in rats. <a href="#">Kidney Int. 60: 87-95.</a></li> <li>van der Kaaij, N.P. <i>et al.</i> (2005) Surfactant pretreatment ameliorates ischemia-reperfusion injury of the lung. <a href="#">Eur J Cardiothorac Surg. 27: 774-82.</a></li> <li>Pauly, A. <i>et al.</i> (2007) New tools for the evaluation of toxic ocular surface changes in</li> </ol>

the rat. [Invest Ophthalmol Vis Sci. 48: 5473-83.](#)

14. Nakagawa, K. *et al.* (2002) Lecithinized superoxide dismutase reduces cold ischemia-induced chronic allograft dysfunction. [Kidney Int. 61: 1160-9.](#)

15. Dugast, A.S. *et al.* (2008) Myeloid-derived suppressor cells accumulate in kidney allograft tolerance and specifically suppress effector T cell expansion. [J Immunol. 180: 7898-906.](#)

16. Ysebaert, D.K. *et al.* (2000) Identification and kinetics of leukocytes after severe ischaemia/reperfusion renal injury. [Nephrol Dial Transplant. 15: 1562-74.](#)

17. Szczesny, G. *et al.* (2004) Limb lymph node response to bone fracture. [Lymphat Res Biol. 2: 155-64.](#)

18. Steen, P.W. *et al.* (2010) Neutrophil responses to injury or inflammation impair peripheral gustatory function. [Neuroscience. 167: 894-908.](#)

19. Cantaluppi V *et al.* (2015) Endothelial progenitor cell-derived extracellular vesicles protect from complement-mediated mesangial injury in experimental anti-Thy1.1 glomerulonephritis. [Nephrol Dial Transplant. 30 \(3\): 410-22.](#)

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**Further Reading** 1. Kampinga, J. *et al.* (1990) Thymocyte differentiation and thymic micro-environment development in the foetal rat thymus: an immunohistological approach. thymus in tolerance induction. In: The role of the Thymus Update 3. Eds. M.D. Kendall and M.A. Ritter. Harwood Academic Publishers GmbH, Switzerland.

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10055 available at: <https://www.bio-rad-antibodies.com/SDS/MCA967>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138...) [Alk. Phos.](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

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