

Datasheet: MCA967

BATCH NUMBER 160216

Description:	MOUSE ANTI RAT GRANULOCYTES AND ERYTHROID CELLS
Specificity:	GRANULOCYTES
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	HIS48
Isotype:	IgM
Quantity:	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.

	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.**

Target Species	Rat
Product Form	Tissue Culture Supernatant - liquid

Preparation	Tissue Culture Supernatant containing 0.2M Tris/HCl pH7.4 and 8% foetal calf serum
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Immunogen	PVG rat spleen cell suspension.
RRID	AB_322077
Specificity	<p>Mouse anti Rat granulocytes and erythroid cells antibody, clone HIS48 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 (Reckless et al. 2001).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to stain 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 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. Lab Invest. 64 (6): 754-65. 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. Immunology. 103 (2): 244-54. 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. Regul Pept. 159: 100-9. Howard, K.M. <i>et al.</i> (2009) Differential expression of platelet-activating factor acetylhydrolase in lung macrophages. Am J Physiol Lung Cell Mol Physiol. 297: L1141-50. Trinh, L. <i>et al.</i> (2008) The corneal endothelium in an endotoxin-induced uveitis model: correlation between in vivo confocal microscopy and immunohistochemistry. Mol Vis. 14: 1149-56. 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. Int J Cardiol. pii: S0167-5273(12)01187-4. Foucher, P. <i>et al.</i> (1999) Antimyeloperoxidase-associated Lung Disease An Experimental Model Am J Respir Crit Care Med. 160: 987-94. Della Coletta Francescato, H. <i>et al.</i> (2011) Inhibition of hydrogen sulphide formation reduces cisplatin-induced renal damage. Nephrol Dial Transplant. 26: 479-88. 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. Cancer Res. 66: 4708-14. Homo-Delarche, F. <i>et al.</i> (2006) Islet inflammation and fibrosis in a spontaneous model of type 2 diabetes, the GK rat. Diabetes. 55: 1625-33. Panichi, V. <i>et al.</i> (2001) Effects of 1,25(OH)2D3 in experimental mesangial proliferative nephritis in rats. Kidney Int. 60: 87-95. van der Kaaij, N.P. <i>et al.</i> (2005) Surfactant pretreatment ameliorates ischemia-reperfusion injury of the lung. Eur J Cardiothorac Surg. 27: 774-82. Pauly, A. <i>et al.</i> (2007) New tools for the evaluation of toxic ocular surface changes in

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.](#)

20. Cakała-Jakimowicz, M. & Puzianowska-Kuznicka, M. (2022) Towards Understanding the Lymph Node Response to Skin Infection with Saprophytic *Staphylococcus epidermidis*. [Biomedicines. 10 \(5\): 1021.](#)

21. Zhou, X. *et al.* (2022) Dusp6 deficiency attenuates neutrophil-mediated cardiac damage in the acute inflammatory phase of myocardial infarction. [Nat Commun. 13 \(1\): 6672.](#)

Further Reading	1. Kampinga, J. <i>et al.</i> (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	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.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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 10055
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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](#)

North & South Tel: +1 800 265 7376

Worldwide Tel: +44 (0)1865 852 700

Europe Tel: +49 (0) 89 8090 95 21

America Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

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

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