

Datasheet: MCA967

BATCH NUMBER 172691

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. Foucher, P. <i>et al.</i> (1999) Antimyeloperoxidase-associated Lung Disease An Experimental Model Am J Respir Crit Care Med. 160: 987-94. Ysebaert, D.K. <i>et al.</i> (2000) Identification and kinetics of leukocytes after severe ischaemia/reperfusion renal injury. Nephrol Dial Transplant. 15: 1562-74. 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. 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. Nakagawa, K. <i>et al.</i> (2002) Lecithinized superoxide dismutase reduces cold ischemia-induced chronic allograft dysfunction. Kidney Int. 61: 1160-9. Szczesny, G. <i>et al.</i> (2004) Limb lymph node response to bone fracture. Lymphat Res Biol. 2: 155-64. 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. 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. 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. 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. 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. Dugast, A.S. <i>et al.</i> (2008) Myeloid-derived suppressor cells accumulate in kidney allograft tolerance and specifically suppress effector T cell expansion. J Immunol. 180: 7898-906.

14. Howard, K.M. *et al.* (2009) Differential expression of platelet-activating factor acetylhydrolase in lung macrophages. [Am J Physiol Lung Cell Mol Physiol. 297: L1141-50.](#)
15. Dimitrijević, M. *et al.* (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.](#)
16. Steen, P.W. *et al.* (2010) Neutrophil responses to injury or inflammation impair peripheral gustatory function. [Neuroscience. 167: 894-908.](#)
17. Della Coletta Francescato, H. *et al.* (2011) Inhibition of hydrogen sulphide formation reduces cisplatin-induced renal damage. [Nephrol Dial Transplant. 26: 479-88.](#)
18. Narita, T. *et al.* (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.](#)
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. *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.

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.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10055 available at: <https://www.bio-rad-antibodies.com/SDS/MCA967>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

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

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

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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