

# Datasheet: MCA54PE

**BATCH NUMBER 1807**

<b>Description:</b>	MOUSE ANTI RAT CD43:RPE
<b>Specificity:</b>	CD43
<b>Other names:</b>	LEUKOSIALIN
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	W3/13
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

## 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

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.

<b>Target Species</b>	Rat		
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide		
	1%	Bovine Serum Albumin	

5% Sucrose

Immunogen	Rat thymocyte membrane glycoproteins.
External Database Links	<b>UniProt:</b> <a href="#">P13838</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">24796</a> Spn <a href="#">Related reagents</a>
RRID	AB_321709
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p><b>Mouse anti Rat CD43 antibody, clone W3/13</b> recognizes the rat CD43 cell surface antigen, also known as leukosialin, sialophorin or W3/13 antigen. CD43 is a 371 amino acid ~95 kDa heavily glycosylated single pass type 1 transmembrane glycoprotein (<a href="#">Killeen et al. 1987</a>) expressed by all leucocytes with the exception of B lymphocytes. CD43, in mice acts as a T-cell counter-receptor for CD169 (Siglec-1) suggesting a role in cell-cell interactions (<a href="#">van den Berg et al. 2001</a>)</p> <p>Mouse anti Rat CD43 antibody, clone W3/13 is routinely tested in flow cytometry on rat splenocytes.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol style="list-style-type: none"><li>1. Brown, W.R.A. <i>et al.</i> (1981) Identification of a glycophorin-like molecule at the cell surface of rat thymocytes. <a href="#">Nature. 289: 456-460.</a></li><li>2. Barclay, A. N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. <a href="#">Immunology. 42: 593-600</a></li><li>3. Forbes, R. D. C. <i>et al.</i> (1983) Leukocyte subsets in first-set rat cardiac allograft rejection. A serial immunohistologic study using monoclonal antibodies <a href="#">Transplantation. 36: 681-686</a></li><li>4. Jung, S. <i>et al.</i> (1994) Therapeutic effect of transforming growth factor-beta 2 on actively induced EAN but not adoptive transfer EAN <a href="#">Immunology. 83: 545-551.</a></li><li>5. Bataller, R. <i>et al.</i> (2003) Prolonged infusion of angiotensin II into normal rats induces stellate cell activation and proinflammatory events in liver. <a href="#">Am J Physiol Gastrointest Liver Physiol. 285: G642-651</a></li><li>6. Rice, E.K. <i>et al.</i> (2003) Induction of MIF synthesis and secretion by tubular epithelial cells: a novel action of angiotensin II. <a href="#">Kidney Int. 63 (4): 1265-75.</a></li><li>7. Schwab, J.M. <i>et al.</i> (2005) Spinal cord injury induces early and persistent lesional P2X4 receptor expression. <a href="#">J Neuroimmunol. 163: 185-9.</a></li><li>8. Conrad, S. <i>et al.</i> (2005) Prolonged lesional expression of RhoA and RhoB following spinal cord injury. <a href="#">J Comp Neurol. 487: 166-75.</a></li><li>9. Zhang, Z. <i>et al.</i> (2008) FTY720 ameliorates experimental autoimmune neuritis by inhibition of lymphocyte and monocyte infiltration into peripheral nerves. <a href="#">Exp Neurol. 210:</a></li></ol>

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18. Kami, K. *et al.* (2019) Role of 72-kDa Heat Shock Protein in Heat-stimulated Regeneration of Injured Muscle in Rat. [J Histochem Cytochem. 67 \(11\): 791-9.](#)
19. Cakala-Jakimowicz, M. & Puzianowska-Kuznicka, M. (2022) Towards Understanding the Lymph Node Response to Skin Infection with Saprophytic *Staphylococcus epidermidis*.. [Biomedicines. 10 \(5\): 1021.](#)
20. Merlini, A. *et al.* (2022) Distinct roles of the meningeal layers in CNS autoimmunity. [Nat Neurosci. 25 \(7\): 887-99.](#)

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**Storage**

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA54PE>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA1209PE\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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