

## Datasheet: MCA54G

**BATCH NUMBER 150544**

<b>Description:</b>	MOUSE ANTI RAT CD43
<b>Specificity:</b>	CD43
<b>Other names:</b>	LEUKOSIALIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	W3/13
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	1 mg

## 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	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.**

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<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
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Rat thymocyte membrane glycoproteins.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P13838</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">24796</a> Spn    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2286557
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<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>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Brown, W.R.A. <i>et al.</i> (1981) Identification of a glycoprotein-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. 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>4. 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>5. Yamanaka, Y. <i>et al.</i> (2011) Immunohistochemical analysis of subcutaneous tissue reactions to methacrylate resin-based root canal sealers. <a href="#">Int Endod J. 44: 669-75.</a></li> <li>6. 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>7. 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> </ol>

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10. Dort, J. *et al.* (2016) Shrimp Protein Hydrolysate Modulates the Timing of Proinflammatory Macrophages in Bupivacaine-Injured Skeletal Muscles in Rats. [Biomed Res Int. 2016: 5214561.](#)
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12. Rice, E.K. *et al.* (2003) Induction of MIF synthesis and secretion by tubular epithelial cells: a novel action of angiotensin II. [Kidney Int. 63 \(4\): 1265-75.](#)
13. Duchesne, E. *et al.* (2013) Mast cells can regulate skeletal muscle cell proliferation by multiple mechanisms. [Muscle Nerve. 48 \(3\): 403-14.](#)
14. Dort, J. *et al.* (2012) Beneficial effects of cod protein on skeletal muscle repair following injury. [Appl Physiol Nutr Metab. 37 \(3\): 489-98.](#)
15. Ornellas, F.M. *et al.* (2019) Mesenchymal Stromal Cells Induce Podocyte Protection in the Puromycin Injury Model. [Sci Rep. 9 \(1\): 19604.](#)

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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 #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA54G>  
10040

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

- |   |   |
|---|---|
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>  |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

To find a 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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