

## Datasheet: MCA54GA

|                      |                     |
|----------------------|---------------------|
| <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>     | 0.1 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                                                                   |

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|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen</b>               | Rat thymocyte membrane glycoproteins.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>External Database Links</b> | <p><b>UniProt:</b><br/> <a href="#">P13838</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">24796</a>    Spn    <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <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 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. 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> <li>8. 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: 681-90.</a></li> <li>9. Xu, K. <i>et al.</i> (2016) Expression of aryl hydrocarbon receptor in rat brain lesions following traumatic brain injury. <a href="#">Diagn Pathol. 11 (1): 72.</a></li> <li>10. Dort, J. <i>et al.</i> (2016) Shrimp Protein Hydrolysate Modulates the Timing of Proinflammatory Macrophages in Bupivacaine-Injured Skeletal Muscles in Rats. <a href="#">Biomed Res Int. 2016: 5214561.</a></li> <li>11. Zhang, Z.M. <i>et al.</i> (2016) Lesional accumulation of CD8(+) cells in sciatic nerves of experimental autoimmune neuritis rats. <a href="#">Neurol Sci. 37 (2): 199-203.</a></li> <li>12. 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> </ol> |
| <b>Storage</b>                 | <p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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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|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shelf Life</b>                    | 18 months from date of despatch.                                                                                                                                                                         |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at:<br>10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a> |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                               |

## Related Products

### Recommended Secondary Antibodies

|                                         |                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>                                                                                                                                                                                    |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |
| Rabbit Anti Mouse IgG (STAR8...)        | <a href="#">DyLight®800</a>                                                                                                                                                                                                         |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Human Anti Mouse IgG1 (HCA036...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®549</a> ,<br><a href="#">DyLight®649</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |

### Recommended Negative Controls

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

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>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<br>Fax: +44 (0)1865 852 739<br>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<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
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