

# Datasheet: MCA54FT BATCH NUMBER 155974

| Description:  | MOUSE ANTI RAT CD43:FITC |  |
|---------------|--------------------------|--|
| Specificity:  | CD43                     |  |
| Other names:  | LEUKOSIALIN              |  |
| Format:       | FITC                     |  |
| Product Type: | Monoclonal Antibody      |  |
| Clone:        | W3/13                    |  |
| Isotype:      | lgG1                     |  |
| Quantity:     | 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|                | 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.

| Target Species               | Rat                               |                         |                     |
|------------------------------|-----------------------------------|-------------------------|---------------------|
| Product Form                 | Purified IgG conjugate            | ed to Fluorescein Isoth | niocyanate Isomer 1 |
| Max Ex/Em                    | Fluorophore                       | Excitation Max (nm)     | Emission Max (nm    |
|                              | FITC                              | 490                     | 525                 |
| Preparation  Buffer Solution | Purified IgG prepared supernatant | . , ,                   | raphy on Protein G  |
| Buller Solution              | Phosphate buffered s              | aiine                   |                     |
| Preservative                 | 0.09% Sodium Azide                |                         |                     |
| Stabilisers                  | 1% Bovine Serum                   | Albumin                 |                     |
| Approx. Protein              | IgG concentration 0.1             | ma/ml                   |                     |

| Concentrations             |   |  |  |
|----------------------------|---|--|--|
| Immunogen                  | Rat thymocyte membrane glycoproteins.   |  |  |
| External Database<br>Links | UniProt: P13838 Related reagents  |  |  |
|                            | Entrez Gene:  |  |  |
|                            | 24796 Spn Related reagents  |  |  |
| RRID                       | AB_322579   |  |  |
| Fusion Partners            | Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.   |  |  |
| Specificity                | Mouse anti Rat CD43 antibody, clone W3/13 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 ( <u>Killeen et al. 1987</u> ) 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 ( <u>van den Berg et al. 2001</u> ) |  |  |
|                            | Mouse anti Rat CD43 antibody, clone W3/13 is routinely tested in flow cytometry on rat splenocytes.   |  |  |
| Flow Cytometry             | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.   |  |  |
| References                 | <ol> <li>Brown, W.R.A. <i>et al.</i> (1981) Identification of a glycophorin-like molecule at the cell surface of rat thymocytes. <u>Nature. 289: 456-460.</u></li> <li>Barclay, A. N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. <u>Immunology. 42: 593-600</u></li> <li>Jung, S. <i>et al.</i> (1994) Therapeutic effect of transforming growth factor-beta 2 on actively</li> </ol>  |  |  |

- 3. Jung, S. *et al.* (1994) Therapeutic effect of transforming growth factor-beta 2 on actively induced EAN but not adoptive transfer EAN <u>Immunology</u>. 83: 545-551.
- 4. Bataller, R. *et al.* (2003) Prolonged infusion of angiotensin II into normal rats induces stellate cell activation and proinflammatory events in liver. <u>Am J Physiol Gastrointest Liver Physiol. 285: G642-651</u>
- 5. Yamanaka, Y. *et al.* (2011) Immunohistochemical analysis of subcutaneous tissue reactions to methacrylate resin-based root canal sealers. <u>Int Endod J. 44: 669-75.</u>
- 6. Schwab, J.M. *et al.* (2005) Spinal cord injury induces early and persistent lesional P2X4 receptor expression. <u>J Neuroimmunol</u>. 163: 185-9.
- 7. Conrad, S. *et al.* (2005) Prolonged lesional expression of RhoA and RhoB following spinal cord injury. <u>J Comp Neurol</u>. 487: 166-75.
- 8. Zhang, Z. *et al.* (2008) FTY720 ameliorates experimental autoimmune neuritis by inhibition of lymphocyte and monocyte infiltration into peripheral nerves. <u>Exp Neurol. 210:</u> 681-90.
- 9. Xu, K. *et al.* (2016) Expression of aryl hydrocarbon receptor in rat brain lesions following traumatic brain injury. <u>Diagn Pathol. 11 (1): 72.</u>

- 10. Dort, J. *et al.* (2016) Shrimp Protein Hydrolysate Modulates the Timing of Proinflammatory Macrophages in Bupivacaine-Injured Skeletal Muscles in Rats. <u>Biomed Res Int. 2016</u>: 5214561.
- 11. Zhang, Z.M. *et al.* (2016) Lesional accumulation of CD8(+) cells in sciatic nerves of experimental autoimmune neuritis rats. <u>Neurol Sci. 37 (2): 199-203.</u>
- 12. Rice, E.K. *et al.* (2003) Induction of MIF synthesis and secretion by tubular epithelial cells: a novel action of angiotensin II. <u>Kidney Int. 63 (4): 1265-75.</u>
- 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.

#### 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. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

| Guarantee                        | 12 months from date of despatch  |
|----------------------------------|--|
| Health And Safety<br>Information | Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA54FT">https://www.bio-rad-antibodies.com/SDS/MCA54FT</a> 10041 |
| Regulatory                       | For research purposes only   |

## Related Products

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA1209F)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

Email: antibody\_sales\_us@bio-rad.com

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M368209:200529'

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