

## Datasheet: MCA970R

**BATCH NUMBER 159141**

|                      |                       |
|----------------------|-----------------------|
| <b>Description:</b>  | MOUSE ANTI RAT RECA-1 |
| <b>Specificity:</b>  | RECA-1                |
| <b>Format:</b>       | Purified              |
| <b>Product Type:</b> | Monoclonal Antibody   |
| <b>Clone:</b>        | HIS52                 |
| <b>Isotype:</b>      | IgG1                  |
| <b>Quantity:</b>     | 0.25 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             |     |    | ▪              |                    |
| Immunohistology - Frozen   | ▪   |    |                |                    |
| Immunohistology - Paraffin |     |    | ▪              |                    |
| 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. The suggested working dilution is 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>Species Cross Reactivity</b> | Does not react with:Goat, Chicken, Guinea Pig, Sheep, Mouse, Rabbit, Pig                      |
| <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>Approx. Protein Concentrations</b> | IgG concentration 0.5 mg/ml  |
| <b>Immunogen</b>                      | Stromal cells from rat lymph node.   |
| <b>RRID</b>                           | AB_323297  |
| <b>Fusion Partners</b>                | Spleen cells from immunised mice were fused with cells of the SP2/0 mouse myeloma cell line.   |
| <b>Specificity</b>                    | <b>Mouse anti Rat RECA-1 antibody, clone HIS52</b> recognizes RECA-1, a cell surface antigen which is expressed by all rat endothelial cells. The endothelium is the thin layer of cells that line the interior surface of blood vessels, forming an interface between circulating blood in the lumen and the rest of the vessel wall. Endothelial cells line the entire circulatory system, from the heart to the smallest capillary.   |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>1. Duijvestijn, A.M. <i>et al.</i> (1992) Antibodies defining rat endothelial cells: RECA-1, a pan-endothelial cell-specific monoclonal antibody. <a href="#">Lab Invest. 66 (4): 459-66.</a></li> <li>2. Konno, T. <i>et al.</i> (2007) Pregnancy in the brown Norway rat: a model for investigating the genetics of placentation. <a href="#">Biol Reprod. 76 (4): 709-18.</a></li> <li>3. Alam, S.M. <i>et al.</i> (2008) Decidual cells produce a heparin-binding prolactin family cytokine with putative intrauterine regulatory actions. <a href="#">J Biol Chem. 283 (27): 18957-68.</a></li> <li>4. Benton RL <i>et al.</i> (2009) Transcriptional activation of endothelial cells by TGFβ coincides with acute microvascular plasticity following focal spinal cord ischaemia/reperfusion injury. <a href="#">ASN Neuro. 1 (3): pii: e00015.</a></li> <li>5. Androutsellis-Theotokis, A. <i>et al.</i> (2010) Angiogenic factors stimulate growth of adult neural stem cells. <a href="#">PLoS One. 5 (2): e9414.</a></li> <li>6. Schödel, J. <i>et al.</i> (2010) Factor inhibiting HIF limits the expression of hypoxia-inducible genes in podocytes and distal tubular cells. <a href="#">Kidney Int. 78 (9): 857-67.</a></li> <li>7. March, S. <i>et al.</i> (2009) Microenvironmental regulation of the sinusoidal endothelial cell phenotype <i>in vitro</i>. <a href="#">Hepatology. 50: 920-8.</a></li> <li>8. Szmydynger-Chodobska, J. <i>et al.</i> (2011) Multiple sites of vasopressin synthesis in the injured brain. <a href="#">J Cereb Blood Flow Metab. 31: 47-51.</a></li> <li>9. Bexell, D. <i>et al.</i> (2009) Bone marrow multipotent mesenchymal stroma cells act as pericyte-like migratory vehicles in experimental gliomas. <a href="#">Mol Ther. 17: 183-90.</a></li> <li>10. Valable, S. <i>et al.</i> (2009) MRI assessment of hemodynamic effects of angiopoietin-2 overexpression in a brain tumor model. <a href="#">Neuro Oncol. 11: 488-502.</a></li> <li>11. Hamdi, H. <i>et al.</i> (2011) Epicardial adipose stem cell sheets results in greater post-infarction survival than intramyocardial injections. <a href="#">Cardiovasc Res. 91 (3): 483-91.</a></li> <li>12. Morin-Brureau, M. <i>et al.</i> (2011) Epileptiform activity induces vascular remodeling and zonula occludens 1 downregulation in organotypic hippocampal cultures: role of VEGF signaling pathways. <a href="#">J Neurosci. 31: 10677-88</a></li> <li>13. Hawthorne, A.L. <i>et al.</i> (2011) The unusual response of serotonergic neurons after CNS Injury: lack of axonal dieback and enhanced sprouting within the inhibitory environment of the glial scar. <a href="#">J Neurosci. 31: 5605-16.</a></li> </ol> |

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**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.

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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/MCA970R>  
10040

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
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|                                  |   |                  |   |               |   |
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