

# Datasheet: MCA643R

**BATCH NUMBER 152777**

|                      |                     |
|----------------------|---------------------|
| <b>Description:</b>  | MOUSE ANTI RAT CD44 |
| <b>Specificity:</b>  | CD44                |
| <b>Other names:</b>  | H-CAM, PGP-1        |
| <b>Format:</b>       | Purified            |
| <b>Product Type:</b> | Monoclonal Antibody |
| <b>Clone:</b>        | OX-50               |
| <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               | ▪   |    |                | 1/50 - 1/100       |
| Immunohistology - Frozen (1) | ▪   |    |                |                    |
| Immunohistology - Paraffin   |     | ▪  |                |                    |
| 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)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

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|-----------------------|-----------------------------------------------------------------------------------------------|
| <b>Target Species</b> | Rat                                                                                           |
| <b>Product Form</b>   | Purified IgG - liquid                                                                         |
| <b>Preparation</b>    | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Buffer Solution                | Phosphate buffered saline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Preservative Stabilisers       | 0.09% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Carrier Free                   | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Immunogen                      | Rat T cell blasts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| External Database Links        | <p><b>UniProt:</b><br/> <a href="#">P26051</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">25406</a>   Cd44   <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| RRID                           | AB_566756                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Fusion Partners                | Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS0/1 myeloma cell line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity                    | <p><b>Mouse anti Rat CD44 antibody, clone OX-50</b> recognizes the rat CD44 cell surface antigen, also known as Extracellular matrix receptor III, P90 lymphocyte homing/adhesion receptor, HUTCH-I, Hermes antigen, Hyaluronate receptor, Phagocytic glycoprotein 1, PGP-1 or Phagocytic glycoprotein I.</p> <p>CD44 is a 482 amino acid ~85 kDa single pass type I transmembrane glycoprotein, expressed by T cells, B cells, macrophages and thymocytes, with expression being increased following activation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Flow Cytometry                 | Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| References                     | <ol style="list-style-type: none"> <li>1. Stevenson, K.S. <i>et al.</i> (2009) Isolation, characterization, and differentiation of thy1.1-sorted pancreatic adult progenitor cell populations. <a href="#">Stem Cells Dev. 18:1389-98.</a></li> <li>2. Jiang, T.S. <i>et al.</i> (2010) Reconstruction of the corneal epithelium with induced marrow mesenchymal stem cells in rats. <a href="#">Mol Vis. 16: 1304-16.</a></li> <li>3. Kanellis, J. <i>et al.</i> (2010) JNK signalling in human and experimental renal ischaemia/reperfusion injury. <a href="#">Nephrol Dial Transplant. 25: 2898-908.</a></li> <li>4. Li, S. <i>et al.</i> (2010) Upregulation of CXCR4 favoring neural-like cells migration via AKT activation. <a href="#">Neurosci Res. 67: 293-9.</a></li> <li>5. Stephens, L.A. <i>et al.</i> (2004) Phenotypic characterization of regulatory CD4+CD25+ T cells in rats. <a href="#">Int Immunol. 16: 365-75.</a></li> <li>6. Rice, C.M. <i>et al.</i> (2010) Multipotent adult progenitor cell isolation and proliferation in cytokine and serum-free medium conditioned by rat B104 cells. <a href="#">Br J Haematol. 148: 441-4.</a></li> <li>7. Carulli, D. <i>et al</i> (2006) Composition of perineuronal nets in the adult rat cerebellum and</li> </ol> |

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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/MCA643R>  
10040

## Related Products

### Recommended Secondary Antibodies

|                                         |                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</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> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |

### Recommended Negative Controls

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

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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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](https://bio-rad-antibodies.com/datasheets)

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