

## Datasheet: MCA911

|                      |                       |
|----------------------|-----------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD47 |
| <b>Specificity:</b>  | CD47                  |
| <b>Other names:</b>  | SIRP LIGAND           |
| <b>Format:</b>       | Purified              |
| <b>Product Type:</b> | Monoclonal Antibody   |
| <b>Clone:</b>        | BRIC126               |
| <b>Isotype:</b>      | IgG2b                 |
| <b>Quantity:</b>     | 0.2 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             | ▪   |    |                | 1/10               |
| Immunohistology - Frozen   | ▪   |    |                |                    |
| Immunohistology - Paraffin |     |    | ▪              |                    |
| ELISA                      |     |    | ▪              |                    |
| Immunoprecipitation        | ▪   |    |                |                    |
| Western Blotting (1)       | ▪   |    |                |                    |
| Functional Assays (2)      | ▪   |    |                |                    |

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) **BRIC126 recognizes CD47 under non-reducing conditions, the CD47 epitope recognized is lost on reduction, see [Shahein et al.](#) for details**

(2) **This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.**

### Target Species

Human

### Species Cross Reactivity

Reacts with: Dog, Bovine, Sheep, Pig

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

|                                       |  |
|---------------------------------------|--|
| <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>                | TRIS buffered glycine  |
| <b>Preservative Stabilisers</b>       | <0.1% Sodium Azide (NaN <sub>3</sub> )   |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1 mg/ml  |
| <b>Immunogen</b>                      | Human erythrocytes   |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">Q08722</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">961</a>    CD47    <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                       | MER6   |
| <b>RRID</b>                           | AB_321436  |
| <b>Specificity</b>                    | <b>Mouse anti human CD47 antibody, clone BRIC126</b> recognises the human CD47 cell surface glycoprotein, a heavily N-glycosylated 47-52 kDa molecule. CD47 is expressed on all cells and tissues so far examined, although expression is reduced on erythrocytes of the rare Rh null phenotype.   |
| <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. Ticchioni, M. <i>et al.</i> (2001) Integrin-associated protein (CD47/IAP) contributes to T cell arrest on inflammatory vascular endothelium under flow. <a href="#">FASEB J. 15: 341-50.</a></li> <li>2. Shahein, Y.E. <i>et al.</i> (2002) Molecular cloning and functional characterization of the pig homologue of integrin-associated protein (IAP/CD47). <a href="#">Immunology. 106: 564-76.</a></li> <li>3. Brooke, G. <i>et al.</i> (2004) Human lymphocytes interact directly with CD47 through a novel member of the signal regulatory protein (SIRP) family. <a href="#">J Immunol. 173: 2562-70.</a></li> <li>4. Ide, K. <i>et al.</i> (2007) Role for CD47-SIRPalpha signaling in xenograft rejection by macrophages. <a href="#">Proc Natl Acad Sci U S A. 104 (12): 5062-6.</a></li> <li>5. Lecchi, C. <i>et al.</i> (2008) Bovine alpha-1 acid glycoprotein can reduce the chemotaxis of bovine monocytes and modulate CD18 expression. <a href="#">Vet Res. 39: 50.</a></li> <li>6. Chao, M.P. <i>et al.</i> (2010) Anti-CD47 antibody synergizes with rituximab to promote phagocytosis and eradicate non-Hodgkin lymphoma. <a href="#">Cell. 142: 699-713.</a></li> <li>7. Wewer, C. <i>et al.</i> (2011) Transcellular migration of neutrophil granulocytes through the blood-cerebrospinal fluid barrier after infection with <i>Streptococcus suis</i>. <a href="#">J Neuroinflammation. 8: 51.</a></li> <li>8. Chao, M.P. <i>et al.</i> (2011) Therapeutic antibody targeting of CD47 eliminates human</li> </ol> |

- acute lymphoblastic leukemia. [Cancer Res. 71 \(4\): 1374-84.](#)
9. Petrova, P.S. *et al.* (2017) TTI-621 (SIRP $\alpha$ Fc): A CD47-Blocking Innate Immune Checkpoint Inhibitor with Broad Antitumor Activity and Minimal Erythrocyte Binding. [Clin Cancer Res. 23 \(4\): 1068-79.](#)
10. Noda, G.S. *et al.* (2020) Specificities and isotypes of erythrocytes autoantibodies in patients with warm autoimmune hemolytic anemia [Rev Cubana Hematol Inmunol Hemoter 36\(4\): e1283.](#)
11. Kosaka, A. *et al.* (2021) CD47 blockade enhances the efficacy of intratumoral STING-targeting therapy by activating phagocytes. [J Exp Med. 218 \(11\): e20200792.](#)
12. Wang, Z. *et al.* (2021) The effects of cell surface CD47 downregulation on ischaemia-reperfusion injury during pig liver transplantation. [Int J Exp Pathol. 102 \(3\): 140-147.](#)

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**Further Reading** 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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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 #10072 available at: <https://www.bio-rad-antibodies.com/SDS/MCA911>  
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**Regulatory** For research purposes only

## 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 (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR9...)        | <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> |

### Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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

**Worldwide** Tel: +44 (0)1865 852 700

**Europe** Tel: +49 (0) 89 8090 95 21

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

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

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

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

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

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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