

## Datasheet: MCA2514A647T

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|----------------------|--|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD47:Alexa Fluor® 647 |
| <b>Specificity:</b>  | CD47                                   |
| <b>Other names:</b>  | SIRP LIGAND                            |
| <b>Format:</b>       | ALEXA FLUOR® 647                       |
| <b>Product Type:</b> | Monoclonal Antibody                    |
| <b>Clone:</b>        | 1/1A4                                  |
| <b>Isotype:</b>      | IgG2b                                  |
| <b>Quantity:</b>     | 25 TESTS/0.25ml                        |

### 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 | ▪   |    |                | Neat - 1/5         |

Where this product 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 product for use in their own system using appropriate negative/positive controls.

|                                       |   |                            |                          |
|---------------------------------------|---|----------------------------|--------------------------|
| <b>Target Species</b>                 | Human   |                            |                          |
| <b>Product Form</b>                   | Purified IgG conjugated to Alexa Fluor® 647 - liquid  |                            |                          |
| <b>Max Ex/Em</b>                      | <b>Fluorophore</b>  | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                       | Alexa Fluor®647   | 650                        | 665                      |
| <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 (NaN <sub>3</sub> )<br>1% Bovine Serum Albumin                             |                            |                          |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.05mg/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_1102098  |
| <b>Fusion Partners</b>         | Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.  |
| <b>Specificity</b>             | <p><b>Mouse anti Human CD47 antibody, clone 1/1A4</b> recognizes human CD47, also known as integrin-associated protein, a 50kDa glycoprotein expressed on all haematopoietic cell lines, epithelial cells, endothelial cells, fibroblasts and many tumour cell lines.</p> <p>CD47 is involved in several cellular processes including regulation of T cell and dendritic cell activation, regulation of neutrophil (PMN) chemotaxis, caspase-independent apoptosis, and may act as a signal transducer in the regulation of cation fluxes across cell membranes. CD47 has been identified as a ligand for the inhibitory macrophage receptor known as signal regulatory protein alpha (SIRPalpha) and as a receptor for thrombospondin-1.</p> <p>Cross-linking of CD47 with clone 1/1A4 co-stimulates the proliferation of T cells (<a href="#">Waclavicek <i>et al.</i> 1993</a>).</p> |
| <b>Flow Cytometry</b>          | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.   |
| <b>References</b>              | 1. Waclavicek, M. <i>et al.</i> (1997) T cell stimulation via CD47: agonistic and antagonistic effects of CD47 monoclonal antibody 1/1A4. <a href="#">J Immunol. 159 (11): 5345-54.</a>   |
| <b>Further Reading</b>         | 1. Frazier, W.A. <i>et al.</i> (1999) The thrombospondin receptor integrin-associated protein (CD47) functionally couples to heterotrimeric Gi. <a href="#">J Biol Chem. 274 (13): 8554-60.</a>   |
| <b>Storage</b>                 | <p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p>  |
| <b>Guarantee</b>               | 12 months from date of despatch   |

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2514A647T>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA691A647\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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