

# Datasheet: MCA2633A647

| Description:  | MOUSE ANTI HUMAN CD276:Alexa Fluor® 647 |  |  |
|---------------|---|--|--|
| Specificity:  | CD276                                   |  |  |
| Other names:  | B7-H3                                   |  |  |
| Format:       | ALEXA FLUOR® 647                        |  |  |
| Product Type: | Monoclonal Antibody                     |  |  |
| Clone:        | MIH42                                   |  |  |
| Isotype:      | lgG1                                    |  |  |
| Quantity:     | 100 TESTS/1ml                           |  |  |
|               |   |  |  |

## **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 <u>www.bio-rad-antibodies.com/protocols</u> . |                                |                    |  |                           |
|-----------------------------------|--|--------------------------------|--------------------|--|---------------------------|
|                                   |  | Yes                            | No                 | Not Determined                               | Suggested Dilution        |
|                                   | Flow Cytometry   | •                              |                    |  | Neat - 1/10               |
|                                   | Where this product has<br>necessarily exclude its<br>a guide only. It is recon<br>system using appropria   | use in such pr<br>nmended that | ocedure<br>the use | es. Suggested workin<br>titrates the product | ng dilutions are given as |
| Target Species                    | Human  |                                |                    |  |                           |
| Product Form                      | Purified IgG conjugated to Alexa Fluor® 647 - liquid   |                                |                    |  |                           |
| Max Ex/Em                         | Fluorophore<br>Alexa Fluor®647   | Excitation Max<br>650          | (nm)               | Emission Max (nm)<br>665                     |                           |
| Preparation                       | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.   |                                |                    |  |                           |
| Buffer Solution                   | Phosphate buffered saline  |                                |                    |  |                           |
| Preservative<br>Stabilisers       | 0.09% Sodium Azide (NaN <sub>3</sub> )<br>1% Bovine Serum Albumin  |                                |                    |  |                           |
| Approx. Protein<br>Concentrations | IgG concentration 0.05mg/ml  |                                |                    |  |                           |

| External Database<br>Links | UniProt:<br><u>Q5ZPR3</u> <u>Related reagents</u><br>Entrez Gene:<br><u>80381</u> CD276 <u>Related reagents</u>  |
|----------------------------|--|
| Synonyms                   | B7H3   |
| RRID                       | AB_1101688   |
| Specificity                | <ul> <li>Mouse anti Human CD276 antibody, clone MIH42 detects CD276, a member of the B7 family of co-stimulatory molecules also known as B7-H3. CD276 is a type I transmembrane protein that induces the proliferation of CD4+ and CD8+ T cells, enhances the generation of cytotoxic T cells and selectively stimulates the production of interferon gamma.</li> <li>Expression of CD276 can be induced on dendritic cells and monocytes by inflammatory cytokines, and is also widely expressed in peripheral tissues including the heart, kidney, testis and colon. In humans, CD276 exists as two isoforms which result from gene duplication and differential splicing.</li> </ul>  |
|                            | CD276 is reported to have therapeutic potential for the regulation of cell-mediated immune responses to cancer, particularly in conjunction with anti-angiogenic therapy.  |
| Flow Cytometry             | Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.  |
| References                 | <ol> <li>Chapoval, A.I. <i>et al.</i> (2001) B7-H3: a costimulatory molecule for T cell activation and<br/>IFN-gamma production. <u>Nat Immunol. 2 (3): 269-74.</u></li> <li>Sun, X. <i>et al.</i> (2003) Mouse B7-H3 induces antitumor immunity. <u>Gene Ther. 10 (20):</u><br/><u>1728-34.</u></li> <li>Ma, L. <i>et al.</i> (2007) Complete eradication of hepatocellular carcinomas by combined<br/>vasostatin gene therapy and B7H3-mediated immunotherapy. <u>J Hepatol. 46 (1): 98-106.</u></li> <li>Tjomsland, V. <i>et al.</i> (2010) Semi mature blood dendritic cells exist in patients with<br/>ductal pancreatic adenocarcinoma owing to inflammatory factors released from the tumor.<br/><u>PLoS One. 5: e13441.</u></li> <li>Schulte, B.M. <i>et al.</i> (2015) Enterovirus-infected β-cells induce distinct response patterns<br/>in BDCA1+ and BDCA3+ human dendritic cells. <u>PLoS One. 10 (3): e0121670.</u></li> </ol> |
| Storage                    | Store at +4°C or at -20°C if preferred.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. This product is photosensitive and should be<br>protected from light. Avoid repeated freezing and thawing as this may denature the<br>antibody. Should this product contain a precipitate we recommend microcentrifugation<br>before use.  |
| Guarantee                  | 18 months from date of despatch.   |

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|----------------------------------|--|
| Health And Safety<br>Information | Material Safety Datasheet documentation #10041 available at: 10041: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</u>   |
| Regulatory                       | For research purposes only   |

### **Related Products**

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)

#### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376 Worldwide America Fax: +1 919 878 3751 Email: antibody\_sales\_us@bio-rad.com

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