

## Datasheet: MCA2627

|                      |                        |
|----------------------|------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD274 |
| <b>Specificity:</b>  | CD274                  |
| <b>Other names:</b>  | PD-L1                  |
| <b>Format:</b>       | Purified               |
| <b>Product Type:</b> | Monoclonal Antibody    |
| <b>Clone:</b>        | MIH2                   |
| <b>Isotype:</b>      | IgG1                   |
| <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             | ▪   |    |                | 1/20 - 1/200       |
| Immunohistology - Frozen   |     |    | ▪              |                    |
| Immunohistology - Paraffin |     |    | ▪              |                    |
| ELISA                      |     |    | ▪              |                    |
| Immunoprecipitation        |     |    | ▪              |                    |
| Western Blotting           |     |    | ▪              |                    |
| Functional Assays          |     |    | ▪              |                    |

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 - 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 (NaN <sub>3</sub> )  |

|                                       |   |
|---------------------------------------|---|
| <b>Carrier Free</b>                   | Yes   |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0mg/ml  |
| <b>Immunogen</b>                      | Human CD274 transfected P815 cells.   |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">Q9NZQ7</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">29126</a>    CD274    <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                       | B7H1, PDCD1L1, PDCD1LG1, PDL1   |
| <b>RRID</b>                           | AB_1510067  |
| <b>Fusion Partners</b>                | Cells from immunised mice were fused with cells of the P3U1 myeloma cell line.  |
| <b>Specificity</b>                    | <p><b>Mouse anti Human CD274 antibody, clone MIH2</b> detects human CD274, also known as B7-H1 and PD-1L, a cell surface glycoprotein which is a member of the B7 family of co-stimulatory molecules. CD274 is expressed constitutively on macrophages and dendritic cells, and is induced on activated T-cells, B-cells, endothelial cells and epithelial cells in response to Interferons alpha, beta and gamma.</p> <p>CD274 is reported to possess dual functions; inhibition of activated effector T cells and co-stimulation of naïve T cells. CD274 inhibits proliferation of activated T cells via ligation to the co-inhibitory molecule CD279 (programmed death-1; PD-1) leading to the secretion of the regulatory cytokine interleukin-10. CD274 has also been shown to costimulate early T cell priming and differentiation.</p> <p>Deregulated CD274 function has been reported in chronic viral and intracellular bacterial infection, as well as in many autoimmune diseases and cancers.</p> |
| <b>Flow Cytometry</b>                 | Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.   |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>1. Kanai, T. <i>et al.</i> (2003) Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. <a href="#">J Immunol. 171 (8): 4156-63.</a></li> <li>2. Darmochwal-Kolarz, D. <i>et al.</i> (2013) The expressions of co-stimulatory molecules are altered on putative antigen-presenting cells in cord blood. <a href="#">Am J Reprod Immunol. 69 (2): 180-7.</a></li> </ol>  |
| <b>Storage</b>                        | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>  |

**Guarantee** 18 months from date of despatch.

---

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

---

**Regulatory** For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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

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

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

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

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

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

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

From March 15, 2021, we will no longer supply printed datasheets with our products.  
Look out for updates on how to access your digital version at [bio-rad-antibodies.com](https://www.bio-rad-antibodies.com)

'M349464:190306'

**Printed on 09 Feb 2021**

---

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)