

## Datasheet: HCA303

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|----------------------|----------------------|
| <b>Description:</b>  | HUMAN ANTI NIVOLUMAB |
| <b>Specificity:</b>  | NIVOLUMAB            |
| <b>Other names:</b>  | Opdivo               |
| <b>Format:</b>       | Purified             |
| <b>Product Type:</b> | Monoclonal Antibody  |
| <b>Clone:</b>        | AbD30264_hlgG1       |
| <b>Isotype:</b>      | IgG1                 |
| <b>Quantity:</b>     | 0.1 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 |
|-------|-----|----|----------------|--------------------|
| ELISA | ▪   |    |                |                    |

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.

#### Product Form

Human IgG1 antibody (lambda light chain) selected from the HuCAL® phage display library and expressed in a human cell line. This antibody is supplied as a liquid.

#### Preparation

Purified IgG prepared by affinity chromatography on Protein A

#### Buffer Solution

Phosphate buffered saline

#### Preservative Stabilisers

0.01% Thiomersal

#### Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

#### Immunogen

Nivolumab

#### Specificity

**Human Anti-Nivolumab Antibody, clone AbD30264\_hlgG1** is a paratope specific, inhibitory anti-idiotypic antibody that specifically recognizes the monoclonal antibody drug

nivolumab. The antibody does not recognize recombinant human programmed cell death 1 (PD-1) or nivolumab in complex with recombinant human PD-1 and can be used to measure free nivolumab levels in serum from patients.

Clone AbD30264\_hIgG1 is a fully human recombinant monoclonal antibody with IgG1 isotype and is suitable as a reference standard in an anti-drug antibody (ADA) assay.

Nivolumab (Opdivo) is a fully human antibody (IgG4/kappa), with the heavy chain mutation S228P (IgG4-Pro). It is used as a first line treatment for inoperable or metastatic melanoma in combination with ipilimumab if the cancer does not have a mutation in BRAF. It is also approved for treatment of advanced non-small cell lung cancer, advanced renal cell carcinoma, classical Hodgkin's lymphoma and advanced head and neck squamous cell carcinoma. Nivolumab is a checkpoint inhibitor and acts as an immuno-modulator by blocking ligand activation of PD-1 receptor on T cells, thereby activating T cells to attack the cancer. Nivolumab blocks PD-1 interaction with PD-1 ligand (PD-L1) and PD-1 ligand 2 (PD-L2).

[View a summary of all anti-nivolumab antibodies](#)

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|--------------------------------------|---|
| <b>Affinity</b>                      | The monovalent intrinsic affinity of AbD30264_hIgG1 was measured as $K_D = 14$ nM by real time, label free molecular interaction analysis on immobilized nivolumab  |
| <b>ELISA</b>                         | Clone AbD30264_hIgG1 can be used in a direct or indirect ELISA. Furthermore, it may be used as a calibrator for the set-up of an anti-drug antibody assay.<br><br>Protocol: <a href="#">Anti-drug antibody assay</a>  |
| <b>Storage</b>                       | This product is shipped at ambient temperature. It is recommended to aliquot and store at $-20^{\circ}\text{C}$ on receipt. When thawed, aliquot the sample as needed. Keep aliquots at $2-8^{\circ}\text{C}$ for short term use (up to 4 weeks) and store the remaining aliquots at $-20^{\circ}\text{C}$ .<br><br>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. |
| <b>Guarantee</b>                     | 12 months from date of despatch   |
| <b>Acknowledgements</b>              | Sold under license of U.S. Patents 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad. Opdivo is a trademark of Bristol-Myers Squibb Company.  |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10094 available at: 10094: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf</a>   |
| <b>Licensed Use</b>                  | For in vitro research purposes and for commercial applications for the provision of in vitro testing services to support preclinical and clinical drug development. Any re-sale in any form or any other commercial application needs a written agreement with Bio-Rad.   |
| <b>Regulatory</b>                    | For research purposes only  |

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**Technical Advice** Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#)

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## Related Products

### Recommended Negative Controls

[RECOMBINANT HUMAN IgG1 LAMBDA ALLOTYPIC G1m3 \(HCA049\)](#)

### Recommended Useful Reagents

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

[HISPEC ASSAY DILUENT \(BUF049A\)](#)

[MOUSE ANTI HUMAN IgG \(Fc\) CH2 DOMAIN:HRP \(MCA647P\)](#)

**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)

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