

Datasheet: HCA301

BATCH NUMBER 162858

Description:	HUMAN ANTI NIVOLUMAB
Specificity:	NIVOLUMAB
Other names:	Opdivo
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD30258_hlgG1
Isotype:	IgG1
Quantity:	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.

	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 AbD30258_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 AbD30258_hlgG1 is a fully human recombinant monoclonal antibody with IgG1 isotype and is suitable as a reference standard in an anti-drug antibody (ADA) assay. A pair of anti-nivolumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, in full immunoglobulin format, is recommended as the detection antibody paired with clone AbD30255 ([HCA299](#)) in monovalent Fab format as the capture antibody.

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](#)

Affinity	The monovalent intrinsic affinity of AbD30258_hlgG1 was measured as $K_D = 2$ nM by real time, label free molecular interaction analysis on immobilized nivolumab.
ELISA	Clone AbD30258_hlgG1 can be used in a direct or indirect ELISA or as detection antibody for nivolumab in a bridging ELISA together with HCA299 as the capture reagent. Furthermore, it may be used as a calibrator for the set-up of an anti-drug antibody assay. Protocol: PK bridging ELISA to measure free drug and anti-drug antibody assay .
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.
Guarantee	12 months from date of despatch
Acknowledgements	This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See bio-rad.com/en-us/trademarks for details. Opdivo is a trademark of Bristol-Myers Squibb Company.
Health And Safety	Material Safety Datasheet documentation #10094 available at:

Information <https://www.bio-rad-antibodies.com/SDS/HCA30110094>

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Regulatory For research purposes only

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

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 \(MCA647P\)](#)

[HUMAN ANTI NIVOLUMAB \(HCA299\)](#)

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'M391816:211015'

Printed on 23 Aug 2023

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