Datasheet: HCA301

Description:	HUMAN ANTI NIVOLUMAB
Specificity:	NIVOLUMAB
Other names:	Opdivo
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD30258_hIgG1
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_hIgG1 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_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. 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_hIgG1 was measured as K_D = 2 nM by real time, label free molecular interaction analysis on immobilized nivolumab.
ELISA	Clone AbD30258_hIgG1 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 Information	Material Safety Datasheet documentation #10094 available at: 10094: https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf

Licensed Use	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.
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 ALLOTYPE 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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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