

Datasheet: HCA301P

BATCH NUMBER 166269

Description:	HUMAN ANTI NIVOLUMAB:HRP
Specificity:	NIVOLUMAB
Other names:	Opdivo
Format:	HRP
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 conjugated to horseradish peroxidase (HRP) and supplied as liquid.
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Source	HKB-11
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	Antibody concentration 1.0 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 intrinsic affinity of the monovalent form of Human anti Nivolumab antibody, clone AbD30258_hIgG1 is $K_D = 2$ nM as measured by real time, label free molecular interaction analysis on immobilized Nivolumab.

ELISA

Human anti Nivolumab antibody, clone AbD30258_hIgG1 can be used in a direct ELISA or as detection antibody for Nivolumab in a bridging ELISA together with [HCA299](#) as the capture reagent.

Protocol: [PK bridging ELISA to measure free drug](#).

Storage

This product is shipped frozen.

When ready to use, thaw and aliquot the sample as needed. Store aliquots at -70°C, if available, otherwise store at -20°C. It is not recommended to keep aliquots at 4°C for more than one week.

Guarantee

12 months from date of despatch

Acknowledgements

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Opdivo is a trademark of Bristol-Myers Squibb Company.

Health And Safety Information Material Safety Datasheet documentation #10094 available at:
<https://www.bio-rad-antibodies.com/SDS/HCA301P>
10094

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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 ALLOTYPED G1m3 \(HCA049\)](#)

Recommended Useful Reagents

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

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

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

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