

# Datasheet: HCA301P BATCH NUMBER INN1804

Description:	HUMAN ANTI NIVOLUMAB:HRP		
Specificity:	NIVOLUMAB		
Other names:	Opdivo		
Format:	HRP		
Product Type:	Monoclonal Antibody		
Clone:	AbD30258_hlgG1		
Isotype:	lgG1		
Quantity:	0.1 mg		

# **Product Details**

Applications
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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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	Antibody concentration 0.1 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 lgG1 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 ELISA or as detection antibody for nivolumab in a bridging ELISA together with <u>HCA299</u> as the capture reagent.

Protocol: PK bridging ELISA to measure free drug

#### **Storage**

Store at -70°C.

Storage in frost-free freezers is not recommended.

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.

#### Guarantee

12 months from date of despatch

#### Acknowledgements

Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany. Opdivo is a trademark of Bristol-Myers Squibb Company.

# Health And Safety Information

Material Safety Datasheet documentation #10094 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA301P">https://www.bio-rad-antibodies.com/SDS/HCA301P</a> 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 <u>HuCAL Antibodies Technical Manual</u>	

# **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)
HUMAN ANTI NIVOLUMAB (HCA299)

North & South Tel: +1 800 265 7376

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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 'M371744:200612'

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