Datasheet: HCA299

BATCH NUMBER 169091

Description:	HUMAN ANTI NIVOLUMAB
Specificity:	NIVOLUMAB
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD30255
Isotype:	HuCAL Fab monovalent
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

A monovalent human recombinant Fab (lambda light chain) selected from the HuCAL phage display library, expressed in *E. coli*. The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

Preparation

Metal chelate affinity chromatography

Source

E.coli

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)

Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

Immunogen

Nivolumab

Specificity	**Human Anti-Nivolumab Antibody, clone AbD30255** 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. A pair of anti-nivolumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, in monovalent Fab format, is recommended as the capture antibody, paired with an HRP conjugated Anti-Nivolumab Antibody in full immunoglobulin format, clone AbD30258_hIgG1 (HCA301) as the detection 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 AbD30255 is K_D = 0.5 nM as measured by real time, label free molecular interaction analysis on immobilized Nivolumab.
ELISA	Human anti Nivolumab antibody, clone AbD30255 can be used in a direct or indirect ELISA system or as capture antibody for nivolumab in a bridging ELISA together with HCA301 (AbD30258_hIgG1) as the detection reagent. Protocol: PK bridging ELISA to measure free drug .
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. His-tag is a trademark of EMD Biosciences.

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/HCA299 10040
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 Secondary Antibodies

Rat Anti Synthetic Peptide DYKDDDDK TAG (MCA4764...) Purified
Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) HRP

Recommended Negative Controls

HuCAL Fab-FH NEGATIVE CONTROL (HCA045)

Recommended Useful Reagents

HISPEC ASSAY DILUENT (BUF049A)
LYNX RAPID HRP ANTIBODY CONJUGATION KIT (LNK002P)
HUMAN ANTI NIVOLUMAB (HCA301)

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