

Datasheet: HCA296

Description:	HUMAN ANTI PEMBROLIZUMAB
Specificity:	PEMBROLIZUMAB
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD30689
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). This antibody is supplied as a liquid.

Preparation

Metal chelate affinity chromatography

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.01% Thiomersal

Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

Immunogen

Pembrolizumab

Specificity

Human Anti-Pembrolizumab Antibody, clone AbD30689 is a paratope specific, inhibitory anti-idiotypic antibody that specifically recognizes the free humanized monoclonal antibody pembrolizumab. The antibody does not recognize recombinant

human programmed cell death 1 (PD-1) or pembrolizumab in complex with recombinant human PD-1 and can be used to measure free pembrolizumab levels in serum from patients.

A pair of anti-pembrolizumab 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-Pembrolizumab Antibody in full immunoglobulin format, clone AbD30685_hlgG1 ([HCA297](#)) as the detection antibody.

Pembrolizumab (Keytruda) is a humanized (IgG4/kappa) antibody with the heavy chain mutation S228P (IgG4-Pro). Pembrolizumab is used to treat inoperable or metastatic melanoma, metastatic non-small cell lung cancer (NSCLC), and as a second-line treatment for head and neck squamous cell carcinoma (HNSCC). Pembrolizumab is a first line treatment for NSCLC if the cancer overexpresses PDL1 and has no mutations in EGFR or ALK. Pembrolizumab is a checkpoint inhibitor and acts as an immunomodulator by blocking ligand activation of PD-1 receptor on T cells, thereby activating T cells to attack the cancer. It blocks PD-1 interaction with PD-1 ligand (PD-L1) and PD-1 ligand 2 (PD-L2).

[View a summary of all anti-pembrolizumab antibodies](#)

Affinity	The monovalent intrinsic affinity of AbD30689 was measured as $K_D = 0.6$ nM by real time, label free molecular interaction analysis on immobilized pembrolizumab
ELISA	Clone AbD30689 can be used in a direct or indirect ELISA or as the capture antibody for pembrolizumab in a bridging ELISA together with HCA297 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 $2-8^{\circ}\text{C}$ 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	Sold under license of U.S. Patents 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad. Keytruda is a trademark of Merck & Co. His-tag is a registered trademark of EMD Biosciences.
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 Useful Reagents

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

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

[HUMAN ANTI PEMBROLIZUMAB \(HCA297\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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

'M386802:210528'

Printed on 29 Aug 2021

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)