

## Datasheet: HCA297

<b>Description:</b>	HUMAN ANTI PEMBROLIZUMAB
<b>Specificity:</b>	PEMBROLIZUMAB
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD30685_hIgG1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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

Pembrolizumab

### Specificity

**Human Anti-Pembrolizumab Antibody, clone AbD30685\_hIgG1** 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.

Clone AbD30685\_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-pembrolizumab 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 AbD30689 ([HCA296](#)) in monovalent Fab format as the capture 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). For NSCLC, pembrolizumab is a first line treatment 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](#)

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<b>Affinity</b>	The monovalent intrinsic affinity of AbD30685_hlgG1 was measured as $K_D = 5$ nM by real time, label free molecular interaction analysis on immobilized pembrolizumab.
<b>ELISA</b>	Clone AbD30685_hlgG1 can be used in a direct or indirect ELISA or as detection antibody for pembrolizumab in a bridging ELISA together with <a href="#">HCA296</a> as the capture reagent. Furthermore, it may be used as a calibrator for the set-up of an anti-drug antibody assay.  Protocol: <a href="#">PK bridging ELISA to measure free drug</a> and <a href="#">anti-drug antibody assay</a>
<b>Storage</b>	Store at +4°C or at -20°C if preferred. 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.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	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. Keytruda is a trademark of Merck & Co.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10094 available at: 10094: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf</a>
<b>Licensed Use</b>	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.
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a>

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## Related Products

### Recommended Negative Controls

[RECOMBINANT HUMAN IgG1 LAMBDA \(HCA049\)](#)

## 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 PEMBROLIZUMAB \(HCA296\)](#)

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**Printed on 20 May 2019**

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