

## Datasheet: HCA297P

**BATCH NUMBER INN1803**

<b>Description:</b>	HUMAN ANTI PEMBROLIZUMAB:HRP
<b>Specificity:</b>	PEMBROLIZUMAB
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD30685_hlgG1
<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.

<b>Product Form</b>	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.
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<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative Stabilisers</b>	0.01% Thiomersal
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<b>Approx. Protein Concentrations</b>	Antibody concentration 0.1 mg/ml
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<b>Immunogen</b>	Pembrolizumab
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<b>Specificity</b>	<b>Human Anti-Pembrolizumab Antibody, clone AbD30685_hlgG1</b> is a paratope specific, inhibitory anti-idiotypic antibody that specifically recognizes the free humanized
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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](#)

<b>Affinity</b>	The monovalent intrinsic affinity of AbD30685_hIgG1 was measured as $K_D = 5$ nM by real time, label free molecular interaction analysis on immobilized pembrolizumab.
<b>ELISA</b>	Clone AbD30685_hIgG1 can be used in a direct ELISA or as detection antibody for pembrolizumab in a bridging ELISA together with <a href="#">HCA296</a> as the capture reagent.  Protocol: <a href="#">PK bridging ELISA to measure free drug</a>
<b>Storage</b>	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.
<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: <a href="https://www.bio-rad-antibodies.com/SDS/HCA297P">https://www.bio-rad-antibodies.com/SDS/HCA297P</a> 10094

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<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>

## Related Products

### Recommended Negative Controls

[RECOMBINANT HUMAN IgG1 LAMBDA ALLOTYPIC G1m3 \(HCA049\)](#)

### Recommended Useful Reagents

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

[MOUSE ANTI HUMAN IgG \(Fc\) CH2 DOMAIN:HRP \(MCA647P\)](#)

[HUMAN ANTI PEMBROLIZUMAB \(HCA296\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://bio-rad-antibodies.com/datasheets)  
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