

Datasheet: HCA297

BATCH NUMBER 165379

Description:	HUMAN ANTI PEMBROLIZUMAB
Specificity:	PEMBROLIZUMAB
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD30685_hlgG1
Isotype:	IgG1
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	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	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml
Immunogen	Pembrolizumab
Specificity	Human Anti-Pembrolizumab Antibody, clone AbD30685_hlgG1 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](#)

Affinity	The intrinsic affinity of the monovalent form of Human anti Pembrolizumab antibody, clone AbD30685_hIgG1 is $K_D = 5$ nM as measured by real time, label free molecular interaction analysis on immobilized Pembrolizumab.
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ELISA	Clone AbD30685_hIgG1 can be used in a direct or indirect ELISA or as detection antibody for pembrolizumab in a bridging ELISA together with HCA296 as the capture reagent. Furthermore, it may be used as a calibrator for the set-up of an anti-drug antibody assay.
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Protocol: [PK bridging ELISA to measure free drug](#) and [anti-drug antibody assay](#)

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.
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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
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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. Keytruda is a trademark of Merck & Co.
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Health And Safety	Material Safety Datasheet documentation #10040 available at:
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Information <https://www.bio-rad-antibodies.com/SDS/HCA297>
10040

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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 [HuCAL Antibodies Technical Manual](#)

Related Products

Recommended Negative Controls

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

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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