

## Datasheet: HCA296

<b>Description:</b>	HUMAN ANTI PEMBROLIZUMAB
<b>Specificity:</b>	PEMBROLIZUMAB
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD30689
<b>Isotype:</b>	HuCAL Fab monovalent
<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

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](#)

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<b>Affinity</b>	The intrinsic affinity of the monovalent form of AbD30689 is $K_D = 0.6$ nM as measured by real time, label free molecular interaction analysis on immobilized Pembrolizumab
<b>ELISA</b>	Human anti Pembrolizumab antibody, clone AbD30689 can be used in a direct or indirect ELISA or as the capture antibody for Pembrolizumab in a bridging ELISA together with <a href="#">HCA297</a> as the detection reagent.  Protocol: <a href="#">PK bridging ELISA to measure free drug.</a>
<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	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 <a href="http://bio-rad.com/en-us/trademarks">bio-rad.com/en-us/trademarks</a> for details. Keytruda is a trademark of Merck & Co. His-tag is a trademark of EMD Biosciences.
<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>

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**Regulatory** For research purposes only

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**Technical Advice** Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#).

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## 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](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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