

## Datasheet: HCA296

**BATCH NUMBER 147826**

<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.

<b>Product Form</b>	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.
<b>Preparation</b>	Metal chelate affinity chromatography
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.01% Thiomersal
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.5 mg/ml
<b>Immunogen</b>	Pembrolizumab
<b>Specificity</b>	<b>Human Anti-Pembrolizumab Antibody, clone AbD30689</b> 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\_hIgG1 ([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](#)

<b>Affinity</b>	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
<b>ELISA</b>	<p>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.</p> <p>Protocol: <a href="#">PK bridging ELISA to measure free drug</a></p>
<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	<p>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="#">bio-rad.com/en-us/trademarks</a> for details.</p> <p>Keytruda is a trademark of Merck &amp; Co.</p> <p>His-tag is a registered trademark of EMD Biosciences.</p>
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10094 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA296">https://www.bio-rad-antibodies.com/SDS/HCA296</a>

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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>

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## Related Products

### Recommended Useful Reagents

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

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

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

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