

## Datasheet: HCA176P

**BATCH NUMBER 158343**

<b>Description:</b>	HUMAN ANTI TRASTUZUMAB:HRP
<b>Specificity:</b>	TRASTUZUMAB
<b>Other names:</b>	HERCEPTIN®
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD16712_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 selected from the HuCAL® phage display library and expressed in a human cell line. Conjugated to horseradish peroxidase (HRP) - liquid.
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.01% Thiomersal
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.1 mg/ml
<b>Immunogen</b>	Trastuzumab (Herceptin®)
<b>Specificity</b>	<b>Human anti Trastuzumab, clone AbD16712_hlgG1</b> , is an anti-idiotypic antibody that

specifically recognizes the humanized monoclonal antibody drug trastuzumab, also known as Herceptin®. Clone AbD16712\_hlgG can be used to measure the levels of trastuzumab and biosimilar products using bioanalytical assays.

In the HRP-conjugated format clone AbD16712\_hlgG1 is ideal for use as a detection antibody in pharmacokinetic (PK) assays. It is a fully human antibody and therefore may also be used as a calibrator in immune response assays to measure the anti-drug-antibody (ADA) response in patient sera.

Trastuzumab is a drug used in the treatment of HER2 positive breast cancer and other HER2 overexpressing cancers including HER2-positive metastatic cancers of the gastrointestinal tract. Trastuzumab binds to the HER2 (or c-erbB2) proto-oncogene, an EGF receptor-like protein found on 20-30% of breast cancer cells. The binding leads to antibody mediated (complement mediated) killing of the HER2 positive cells

[View a summary of all anti-trastuzumab antibodies.](#)

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<b>Affinity</b>	The monovalent intrinsic affinity of this antibody in an unconjugated format was measured as 0.4 nM by real time, label-free molecular interaction analysis on immobilized trastuzumab.
<b>ELISA</b>	This product may be used as a detection reagent in a sandwich ELISA together with <a href="#">HCA169</a> as the capture reagent. Protocol: <a href="#">PK bridging ELISA to measure free drug</a>
<b>References</b>	<ol style="list-style-type: none"><li>1. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody <a href="#">US Patent Application US20170315118</a></li><li>2. Iwamoto, N. <i>et al.</i> (2018) Antibody drug quantitation in coexistence with anti-drug antibodies on nSMOL bioanalysis. <a href="#">Anal Biochem. 540-541: 30-7.</a></li></ol>
<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.
<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.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10094 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA176P10094">https://www.bio-rad-antibodies.com/SDS/HCA176P10094</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.

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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

[HUMAN ANTI TRASTUZUMAB \(HCA166\)](#)

[HUMAN ANTI TRASTUZUMAB \(HCA169\)](#)

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

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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)  
'M371583:200612'

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