

## Datasheet: HCA342

**BATCH NUMBER 165633**

<b>Description:</b>	HUMAN ANTI PERTUZUMAB
<b>Specificity:</b>	PERTUZUMAB
<b>Other names:</b>	Perjeta
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD37070
<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 <i>E. coli</i> . The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.
<b>Preparation</b>	Metal chelate affinity chromatography
<b>Source</b>	<i>E.coli</i>
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.5 mg/ml

**Specificity**

**Human Anti-Pertuzumab Antibody, clone AbD37070** is a paratope specific, inhibitory anti-idiotypic antibody that specifically recognizes the humanized monoclonal antibody pertuzumab. It does not recognize free human epidermal growth factor receptor 2 (HER2) nor pertuzumab in complex with HER2. The antibody can be used to measure free pertuzumab or its biosimilars in patient samples.

Clone AbD37070 is a fully human recombinant monoclonal antibody in monovalent Fab format and is suitable as a capture antibody for pertuzumab in a pharmacokinetic (PK) bridging ELISA to measure free drug when paired with clone AbD37069ia ([HCA345](#), hIgG1 format) as the detection reagent.

Pertuzumab (Perjeta) is an IgG1/kappa antibody humanized from mouse. It has been approved for the treatment of patients with metastatic HER2-positive breast cancer in combination with trastuzumab. Pertuzumab binds to the extracellular domain II of HER2 and inhibits HER2-HER3 dimerization, reducing signaling through intracellular pathways ([Capelan et al. 2013](#)).

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

**Affinity**

The intrinsic affinity of the monovalent form of Human anti Pertuzumab antibody, clone AbD37070 is  $K_D = 0.7$  nM as measured by real time, label free molecular interaction analysis on immobilized Pertuzumab.

**ELISA**

Human anti Pertuzumab antibody, clone AbD37070 can be used in a direct or an indirect ELISA or as capture antibody for Pertuzumab in a bridging ELISA together with [HCA345](#) as the detection reagent.

Protocol: [PK bridging ELISA](#).

**Further Reading**

1. Capelan, M. et al. (2013) Pertuzumab: new hope for patients with HER2-positive breast cancer. [Ann Oncol. 24 \(2\): 273-282](#).

**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.

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

**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](http://bio-rad.com/en-us/trademarks) for details.

His-tag is a trademark of EMD Biosciences.

Perjeta is a trademark of Genentech, Inc.

<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA342">https://www.bio-rad-antibodies.com/SDS/HCA342</a> 10040
<b>Licensed Use</b>	For <i>in vitro</i> research purposes and for commercial applications for the provision of <i>in vitro</i> 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.
<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 Useful Reagents

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

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

[HUMAN ANTI PERTUZUMAB \(HCA341\)](#)

[HUMAN ANTI PERTUZUMAB \(HCA344\)](#)

[HUMAN ANTI PERTUZUMAB \(HCA345\)](#)

[MOUSE ANTI PENTA HISTIDINE TAG:HRP \(MCA5995P\)](#)

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