

## Datasheet: HCA404

<b>Description:</b>	HUMAN ANTI OBINUTUZUMAB
<b>Specificity:</b>	OBINUTUZUMAB
<b>Other names:</b>	Gazyvaro
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD50514ia
<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 (lambda light chain) selected from Bio-Rad's human antibody phage display libraries and expressed in a human cell line. This antibody is supplied as a liquid.
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Source</b>	HKB-11
<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
<b>Immunogen</b>	Obinutuzumab

**Specificity**

**Human Anti-Obinutuzumab Antibody, clone AbD50514ia** is a paratope specific, inhibitory, anti-idiotypic antibody (Type 1) that specifically recognizes the free human monoclonal antibody drug obinutuzumab, and its biosimilar products. It does not recognize the drug target, the B cell surface marker CD20, nor obinutuzumab in complex with CD20. This antibody can be used to measure free obinutuzumab levels in serum from patients.

Clone AbD50514ia (HCA404) is a fully human recombinant monoclonal antibody with IgG1 isotype and is suitable as a surrogate positive control or calibrator in an anti-drug antibody (ADA) assay. This antibody has a monovalent intrinsic affinity of 1.318nM and is one of the three antibodies offered for ADA assays. Antibody [HCA403](#) has an affinity of 0.562nM and [HCA405](#) has an affinity of 15.607nM.

Obinutuzumab (trade name Gazyvaro) is a humanized monoclonal antibody of the IgG1/kappa isotype that specifically targets the extracellular loop of CD20 when expressed at the surface of non malignant and malignant pre-B and mature B-cells. It does not bind CD20 expressed on hematopoietic stem cells, pro-B cells, normal plasma cells or other normal tissue. In non-clinical studies, obinutuzumab induces direct cell death and mediates antibody dependent cellular cytotoxicity (ADCC) and antibody dependent cellular phagocytosis (ADCP) through recruitment of FcγRIII positive immune effector cells. In vivo, obinutuzumab mediates a low degree of complement dependent cytotoxicity (CDC). Obinutuzumab is indicated for the combination treatment of patients with chronic lymphocytic leukemia and follicular lymphoma.

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

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**Affinity**

The monovalent intrinsic affinity of Human anti-Obinutuzumab Antibody, clone AbD50514ia was measured as  $K_D = 1.318 \text{ nM}$  by real time, label-free molecular interaction analysis on immobilized obinutuzumab.

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**ELISA**

Clone AbD50514ia may be used to develop and calibrate immune response assays to measure the anti-drug antibody (ADA) response in patient sera together with clone AbD50319ia ([HCA403](#)) and clone AbD50104ia ([HCA405](#)).  
Protocol: [ADA bridging ELISA](#)

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**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.

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**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](http://bio-rad.com/en-us/trademarks) for details.  
Gazyvaro is a registered trademark of Genentech/ Roche and Biogen.

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/HCA404>  
10040

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**Licensed Use** 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

[HISPEC ASSAY DILUENT \(BUF049A\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(HCA403\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(HCA405\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(TZA048\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(TZA049\)](#)  
[HUMAN ANTI OBINUTUZUMAB:HRP \(TZA049P\)](#)  
[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

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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://www.bio-rad-antibodies.com/datasheets)  
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