

## Datasheet: TZA049P

|                      |                             |
|----------------------|-----------------------------|
| <b>Description:</b>  | HUMAN ANTI OBINUTUZUMAB:HRP |
| <b>Specificity:</b>  | OBINUTUZUMAB                |
| <b>Other names:</b>  | Gazyvaro                    |
| <b>Format:</b>       | HRP                         |
| <b>Product Type:</b> | Monoclonal Antibody         |
| <b>Clone:</b>        | AbD51296                    |
| <b>Isotype:</b>      | Fab antibody                |
| <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 bivalent human recombinant Fab (kappa light chain) generated by coupling of the monovalent SpyTagged Fab [TZA049](#) with a HRP conjugated BiSpyCatcher version 2 ([TZC002P](#)). The coupled antibody has two DYKDDDDK tags and three His6-tags. It contains SpyTag3 peptide ([BLP086](#)) in 5-fold molar excess to block any unreacted Catcher sites. This antibody is supplied as a liquid.

### Preparation

Metal chelate affinity chromatography

### Source

E.coli

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.0095% MIT

### Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

**Specificity**

**Human Anti-Obinutuzumab Antibody, clone AbD51296** 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 AbD51296 is available as a monovalent Fab antibody incorporating a SpyTag at the C-terminus end of the antibody heavy chain for conversion by the end user into alternative formats using any of the [SpyCatchers](#) available in our catalog under product code [TZA049](#). It is also available as a bivalent Fab antibody already conjugated to HRP via coupling to the HRP conjugated BiSpyCatcher2 ([TZC002P](#)) for use in direct ELISA under product code [TZA049P](#).

A pair of anti-obinutuzumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug; clone AbD51296 is recommended as a detection antibody, paired with Human Anti-Obinutuzumab Antibody, clone AbD51167ad ([TZA048](#)) as the capture reagent.

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.](#)

**Affinity**

The monovalent intrinsic affinity of Human anti-Obinutuzumab Antibody, clone AbD51296pap was measured as  $K_D = 0.293$  nM by real time, label-free molecular interaction analysis on immobilized obinutuzumab.

**ELISA**

Clone AbD51296pap may be used as the detection antibody together with AbD51167ad ([TZA048](#)) as the capture antibody for obinutuzumab in a PK bridging ELISA.

Protocol: [PK bridging ELISA](#)

**Storage**

This product is shipped frozen.

When ready to use, thaw and aliquot the sample as needed. Store aliquots at -70°C, if available, otherwise store at -20°C. It is not recommended to keep aliquots at 4°C for more than one week.

**Guarantee**

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.<br>His-tag is a registered trademark of EMD Biosciences.<br>Gazyvaro is a registered trademark of Genentech/ Roche and Biogen. |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #20479 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZA049P">https://www.bio-rad-antibodies.com/SDS/TZA049P</a><br>20479                                                                                                                                                                                                                             |
| <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 for coupling a Fab antibody with a SpyTag to a SpyCatcher can be found at <a href="#">SpyTag and SpyCatcher Products</a> , 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 \(BUF049A\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(HCA403\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(HCA404\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(HCA405\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(TZA048\)](#)  
[HUMAN ANTI OBINUTUZUMAB \(TZA049\)](#)

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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](http://bio-rad-antibodies.com/datasheets)  
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