

Datasheet: TZA049

Description:	HUMAN ANTI OBINUTUZUMAB
Specificity:	OBINUTUZUMAB
Other names:	Gazyvaro
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD51296
Isotype:	Fab antibody
Quantity:	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.

	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 monovalent human recombinant Fab (kappa light chain) selected from Bio-Rad's human antibody phage display libraries expressed in a proprietary *E. coli* strain. The antibody is tagged with a DYKDDDDK tag, a SpyTag version 2 (VPTIVMVDAYKRYK) and a His6-tag (HHHHHH) at the C-terminus of the antibody heavy chain. 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 AbD51296ad was measured as $K_D = 0.293$ nM by real time, label-free molecular interaction analysis on immobilized obinutuzumab.

ELISA

Clone AbD51296ad 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 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 for details. His-tag is a registered trademark of EMD Biosciences. Gazyvaro is a registered trademark of Genentech/ Roche and Biogen.
Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA049 20479
Licensed Use	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.
Regulatory	For research purposes only
Technical Advice	Recommended protocols for coupling a Fab antibody with a SpyTag to a SpyCatcher can be found at SpyTag and SpyCatcher Products , and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual

Related Products

Recommended Useful Reagents

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

[SpyTag3 PEPTIDE \(BLP086\)](#)

[BiSpyCatcher2:HRP \(TZC002P\)](#)

[HUMAN ANTI OBINUTUZUMAB \(HCA403\)](#)

[HUMAN ANTI OBINUTUZUMAB \(HCA404\)](#)

[HUMAN ANTI OBINUTUZUMAB \(HCA405\)](#)

[HUMAN ANTI OBINUTUZUMAB \(TZA048\)](#)

[HUMAN ANTI OBINUTUZUMAB:HRP \(TZA049P\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M430298:240503'

Printed on 03 May 2024