

Datasheet: TZA048

BATCH NUMBER 167085

Description:	HUMAN ANTI OBINUTUZUMAB
Specificity:	OBINUTUZUMAB
Other names:	Afutuzumab
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD51167ad
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

Antibody concentration 0.5 mg/ml

Concentrations

Immunogen Obinutuzumab

Specificity **Human Anti-Obinutuzumab Antibody, clone AbD51167ad** is a paratope specific, inhibitory, anti-idiotypic antibody (Type 1) that specifically recognizes the free human monoclonal antibody drug obinutuzumab, and its biosimilar products. Consequently, this antibody can be used to measure free obinutuzumab levels in serum from patients.

This TrailBlazer Antibody is available in monovalent Fab unconjugated format [TZA048](#). It has a SpyTag incorporated so it can also be converted by the user into alternative antibody formats using any of the SpyCatchers available in our catalog.

[View a summary of all SpyCatcher products](#)

TZA048 can be used to develop a pharmacokinetic (PK) antigen capture assay to measure free obinutuzumab captured on immobilized CD20.

Obinutuzumab (trade name Afutuzumab) is a Fc-glyco-engineered monoclonal IgG1/kappa antibody. It specifically targets the extracellular loop of the CD20 transmembrane antigen on the surface of non-malignant and malignant pre-B and mature B-lymphocytes, but not on hematopoietic stem cells, pro-B-cells, normal plasma cells or other normal tissue. In nonclinical 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 addition, in vivo, Obinutuzumab mediates a low degree of complement dependent cytotoxicity (CDC). Hence, it is an immunosuppressive drug. 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 AbD51167ad was measured as $K_D < 0.096$ nM by real time, label-free molecular interaction analysis on immobilized obinutuzumab.

ELISA Clone AbD51167ad may be used as the capture antibody together with AbD51296ad ([TZA049](#)) or AbD51296pap ([TZA049P](#)) as the detection reagent 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. Afutuzumab 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/TZA048 20479
Licensed Use	For <i>in vitro</i> . 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.
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 \(TZA049\)](#)

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

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