

Datasheet: TZA0102

BATCH NUMBER 170564

Description:	HUMAN ANTI BELIMUMAB
Specificity:	BELIMUMAB
Other names:	Benlysta
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD59897
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 (lambda light chain) selected from the HuCAL® phage display library, 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

Immunogen	Belimumab
Specificity	<p>Human Anti-Belimumab Antibody, clone AbD59897 is a non-inhibitory, anti-idiotypic antibody that specifically recognizes free human monoclonal antibody drug belimumab, and the drug in complex with its target, the B-cell activating factor BAFF (CD257). The antibody does not recognize free BAFF and does not inhibit the binding of belimumab to BAFF.</p> <p>AbD59897 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 TZA0102. 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 TZA0102P.</p> <p>A pair of anti-belimumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay. Clone AbD59900ad (TZA0101) is recommended as the capture antibody paired with clone AbD59897 as the detection antibody, either in purified (TZA0102) or HRP conjugated (TZA0102P) format.</p> <p>Belimumab (trade name Benlysta) is a fully human monoclonal antibody of the IgG1/lambda isotype that binds to the B-cell activating factor BAFF to prevent its binding to B cells. Although part of the normal immune system, B cells are also responsible for the over-aggressive immune response observed in autoimmune diseases, such as systemic lupus erythematosus (SLE). Through its binding to BAFF, belimumab makes BAFF unavailable to B cells, which induces B cells apoptosis and therefore, a reduction in the overall number of circulating B cells. Therefore, belimumab acts as an immunosuppressant drug and is approved for the treatment of systemic lupus erythematosus.</p>
Affinity	The monovalent intrinsic affinity of AbD59897ad was measured as $K_D = 85$ nM by real time, label free molecular interaction analysis on immobilized belimumab
ELISA	Clone AbD59897ad can be used as a detection antibody for belimumab in a PK ELISA together with TZA0101 as the capture antibody.
Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
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.
Benlysta is a registered trademark of GlaxoSmithKline.

Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA0102
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 \(BUF049A\)](#)
[HUMAN ANTI BELIMUMAB \(HCA431\)](#)
[HUMAN ANTI BELIMUMAB \(HCA430\)](#)
[HUMAN ANTI BELIMUMAB \(HCA429\)](#)
[HUMAN ANTI BELIMUMAB \(TZA0100\)](#)
[HUMAN ANTI BELIMUMAB \(TZA0101\)](#)
[HUMAN ANTI BELIMUMAB:HRP \(TZA0102P\)](#)
[HUMAN ANTI BELIMUMAB:HRP \(TZA0100P\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M438184:250404'

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