

Datasheet: HCA431

Description:	HUMAN ANTI BELIMUMAB
Specificity:	BELIMUMAB
Other names:	Benlysta
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD60132ia
Isotype:	IgG1
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	Human IgG1 antibody (lambda light chain) selected from the HuCAL® phage display library and expressed in a human cell line. This antibody is supplied as a liquid.
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Source	HKB-11
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml
Immunogen	Belimumab

Specificity **Human Anti-Belimumab Antibody, clone AbD60132ia** is a paratope specific, inhibitory, anti-idiotypic antibody (Type 1) that specifically recognizes the free human monoclonal antibody drug belimumab, and its biosimilar products. It does not recognize the drug target, the B-cell activating factor BAFF (CD257), nor belimumab in complex with BAFF.

HCA431 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 0.2nM for belimumab and is one of the three antibodies offered for ADA assays. Antibody [HCA429](#) has an affinity of 16nM and [HCA430](#) has an affinity of 3nM for belimumab.

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.

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

Affinity The monovalent intrinsic affinity of Human Anti-Belimumab Antibody, clone AbD60132ia was measured as $K_D = 0.2$ nM by real time, label-free molecular interaction analysis on immobilized belimumab.

ELISA This product may be used to develop and calibrate immune response assays to measure the anti-drug antibody (ADA) response in patient sera together with [HCA429](#) and [HCA430](#).

Protocol: [ADA 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.
Benlysta is a registered trademark of GlaxoSmithKline.

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/HCA431>

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.

Regulatory For research purposes only

Technical Advice Recommended protocols 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 \(HCA430\)](#)

[HUMAN ANTI BELIMUMAB \(HCA429\)](#)

[HUMAN ANTI BELIMUMAB \(TZA0100\)](#)

[HUMAN ANTI BELIMUMAB:HRP \(TZA0100P\)](#)

[HUMAN ANTI BELIMUMAB \(TZA0101\)](#)

[HUMAN ANTI BELIMUMAB \(TZA0102\)](#)

[HUMAN ANTI BELIMUMAB:HRP \(TZA0102P\)](#)

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
'M444726:250717'

Printed on 19 Nov 2025

© 2025 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)