

Datasheet: HCA235

BATCH NUMBER 160604

Description:	HUMAN ANTI OMALIZUMAB
Specificity:	OMALIZUMAB
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD20669_hlgG1
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
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Omalizumab

Specificity

Human Anti-Omalizumab Antibody, clone AbD20669_hlgG1 is a paratope specific, anti-idiotypic antibody that binds specifically to omalizumab but not to free IgE or the drug/immunoglobulin complex. The antibody can be used to measure the levels of

omalizumab and biosimilar products in bioanalytical assays.

Clone AbD20669_hlgG1 can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, HRP-conjugated and in full immunoglobulin (Ig) format, is recommended as the detection antibody, paired with the antibody in monovalent Fab format, clone AbD20669 ([HCA236](#)), as the capture antibody. The antibody in Ig format can also be used to develop and calibrate immune response assays to measure the anti-drug antibody (ADA) response in patient sera.

Omalizumab (brand name Xolair) is a recombinant DNA-derived humanized IgG1 kappa monoclonal antibody used in the treatment of patients with moderate or severe asthma who have demonstrated a positive allergy skin test and whose symptoms are not controlled by inhaled corticosteroids.

Allergic asthma is mediated by IgE released by B cells in response to allergen. Circulating IgE binds to the high-affinity IgE Fc receptor (FcεRI) expressed on basophils and mast cells, triggering the release of histamine, leukotrienes and other mediators associated with the pathophysiology of asthma. Omalizumab is directed against the Fc region of human immunoglobulin E (IgE). By binding to circulating IgE at the site of FcεRI binding, this therapeutic antibody prevents the interaction of IgE with its receptor thus limiting mediator release. Treatment with omalizumab has also been demonstrated to reduce the expression of FcεRI on mast cells and basophils, providing additional clinical benefit.

[View a summary of all Anti-Omalizumab Antibodies](#)

Affinity	The monovalent intrinsic affinity of this antibody was measured as $K_D = 1.1$ nM by real time, label free molecular interaction analysis on immobilized omalizumab.
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ELISA	This product may be used as bridging reagent in ADA assay development or, following HRP-conjugation, as a detection reagent in PK assay development together with HCA236 as the capture reagent. Protocol: PK bridging ELISA to measure free drug Protocol: ADA bridging ELISA
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References	1. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody US Patent application US20170315118A1
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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.
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Guarantee	12 months from date of despatch
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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
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bio-rad.com/en-us/trademarks for details.

Xolair® is a registered trademark of Novartis.

Health And Safety Information	Material Safety Datasheet documentation #10094 available at: 10094: https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf
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

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

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

[RECOMBINANT HUMAN IgE LAMBDA \(HCA171\)](#)

[RECOMBINANT HUMAN IgE KAPPA \(HCA190\)](#)

[HUMAN ANTI OMALIZUMAB \(HCA236\)](#)

[HUMAN ANTI OMALIZUMAB \(DRUG/TARGET COMPLEX\) \(HCA237\)](#)

[HUMAN ANTI OMALIZUMAB \(DRUG/TARGET COMPLEX\) \(HCA238\)](#)

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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
'M391731:211015'

Printed on 02 Mar 2023