

## Datasheet: HCA235

<b>Description:</b>	HUMAN ANTI OMALIZUMAB
<b>Specificity:</b>	OMALIZUMAB
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD20669_hIgG1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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\_hIgG1** 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\_hIgG1 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](#)

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<b>Affinity</b>	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.
<b>ELISA</b>	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 <a href="#">HCA236</a> as the capture reagent. Protocol: <a href="#">PK bridging ELISA to measure free drug</a> Protocol: <a href="#">ADA bridging ELISA</a>
<b>References</b>	1. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody <a href="#">US Patent application US20170315118A1</a>
<b>Storage</b>	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany.  Xolair® is a registered trademark of Novartis.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10094 available at: 10094: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf</a>
<b>Licensed Use</b>	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.
<b>Regulatory</b>	For research purposes only

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**Technical Advice**

Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#)

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## Related Products

### Recommended Useful Reagents

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

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

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

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

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

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

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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