

Datasheet: HCA235P

Description:	HUMAN ANTI OMALIZUMAB:HRP
Specificity:	OMALIZUMAB
Format:	HRP
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. Conjugated to horseradish peroxidase (HRP) - 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 0.1 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_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](#)

Affinity	The intrinsic affinity of the monovalent of this antibody is $K_D = 1.1$ nM as measured by real time, label free molecular interaction analysis on immobilized omalizumab.
ELISA	This product may be used in direct ELISA and as a detection reagent in PK bridging assay together with HCA236 as the capture reagent. Protocol: PK bridging ELISA to measure free drug .
References	1. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody US Patent application US20170315118A1
Storage	This product is shipped frozen. When ready to use, thaw and aliquot the sample as needed. Store aliquots at -70°C, if available, otherwise store at -20°C. It is not recommended to keep aliquots at 4°C for more than one week.
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.
Health And Safety Information	Material Safety Datasheet documentation #10094 available at: 10094: https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf

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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 \(BUF049A\)](#)

[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
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