Datasheet: HCA237P

Description:	HUMAN ANTI OMALIZUMAB (DRUG/TARGET COMPLEX):HRP
Specificity:	OMALIZUMAB DRUG/TARGET COMPLEX
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	AbD20760_hIgG1
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	▪			1/200 - 1/2000

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 (kappa light chain) selected from the HuCAL phage display library and expressed in a human cell line and conjugated to horseradish peroxidase (HRP) - liquid.

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Source

HKB-11

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.0095% MIT

Approx. Protein Concentrations

IgG concentration 1.0 mg/ml

Immunogen

Omalizumab/IgE complex

Specificity

Human anti omalizumab, clone AbD20760_hIgG1 binds specifically to the

omalizumab/IgE (drug/target) complex. The antibody does not recognize free omalizumab or free human IgE. It can be used in bioanalytical assays to detect bound omalizumab or biosimilar products exclusively.

Clone AbD20760_hIgG1 can be used to develop a pharmacokinetic (PK) antigen capture assay to measure omalizumab captured via immobilized human IgE or to measure the level of drug/IgE complex in preclinical or clinical samples. This product is in a full immunoglobulin format and is available directly labeled with HRP. The antibody is also available in unlabeled Fab format (HCA238).

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 form of this antibody is K_D = 0.58 nM as measured by real time, label free molecular interaction analysis on immobilized omalizumab in complex with human IgE.

ELISA

This product may be used in a direct ELISA to detect the omalizumab/IgE complex or to detect omalizumab bound to immobilized IgE.
Protocol: PK antigen capture ELISA to measure bound drug exclusively.

References

1. Harth, S. *et al.* (2019) Generation by phage display and characterization of drug-target complex-specific antibodies for pharmacokinetic analysis of biotherapeutics. MAbs. 11 (1): 178-190.

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

Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/HCA237P 20479
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)
RECOMBINANT HUMAN IgE KAPPA (HCA190)
RECOMBINANT HUMAN IgE LAMBDA (HCA171)
HUMAN ANTI OMALIZUMAB (DRUG/TARGET COMPLEX) (HCA238)
HUMAN ANTI OMALIZUMAB (HCA236)
HUMAN ANTI OMALIZUMAB (HCA235)

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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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