

## Datasheet: HCA316P

**BATCH NUMBER 151587**

<b>Description:</b>	HUMAN ANTI RANIBIZUMAB:HRP
<b>Specificity:</b>	RANIBIZUMAB
<b>Other names:</b>	Lucentis
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD29858_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.

<b>Product Form</b>	Human IgG1 antibody (lambda light chain) selected from the HuCAL® phage display library and expressed in a human cell line. This antibody is conjugated to horseradish peroxidase (HRP) and supplied as liquid.
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.01% Thiomersal
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.1 mg/ml
<b>Immunogen</b>	Ranibizumab

**Specificity** **Human Anti-Ranibizumab Antibody, clone AbD29858\_hlgG1** is a non-inhibitory, anti-idiotypic antibody in full immunoglobulin format that specifically recognizes the monoclonal antibody drug ranibizumab and ranibizumab when in complex with recombinant human vascular endothelial growth factor A (VEGF-A). It does not recognize free human VEGF-A or bevacizumab. This antibody can be used to measure levels of free ranibizumab and biosimilars in patient samples.

Clone AbD29858\_hlgG1 in full immunoglobulin format can be used to develop a pharmacokinetic (PK) antigen capture format assay to measure free ranibizumab that has been captured via immobilized VEGF-A.

Ranibizumab (Lucentis) is a humanized Fab fragment antibody (VH3-23/kappa1), originating from the same parental mouse antibody as bevacizumab (Avastin); it has 4 amino acid exchanges in the heavy chain and 1 amino acid exchange in the light chain compared to bevacizumab. Ranibizumab was first approved to treat wet age-related macular degeneration (AMD), a common form of age-related vision loss. It is also approved for the treatment of macular edema following retinal vein occlusion, diabetic macular edema, and diabetic retinopathy. Ranibizumab inhibits angiogenesis by binding to VEGF-A, blocking its interaction with VEGF receptors on the surface of endothelial cells, and thus preventing the subsequent growth of new blood vessels.

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

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**Affinity** The monovalent intrinsic affinity of AbD29858\_hlgG1 was measured as  $K_D=18$  nM by real time, label-free molecular interaction analysis on immobilized VEGF/ranibizumab complex.

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**ELISA** Clone AbD29858\_hlgG1 can be used in a direct or indirect ELISA on ranibizumab or as a detection reagent for free ranibizumab captured via immobilized VEGF-A.

Protocol: [PK antigen capture ELISA to measure free drug](#)

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**Storage** Store at Store at -70°C.  
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.

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**Guarantee** 12 months from date of despatch

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**Acknowledgements** 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. Lucentis is a trademark of Genentech.

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**Health And Safety Information** Material Safety Datasheet documentation #10094 available at: <https://www.bio-rad-antibodies.com/SDS/HCA316P>  
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**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.

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**Regulatory** 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 Negative Controls

[RECOMBINANT HUMAN IgG1 LAMBDA ALLOTYPED G1m3 \(HCA049\)](#)

### Recommended Useful Reagents

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

[RECOMBINANT HUMAN VEGF-A \(PHP293\)](#)

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