

## Datasheet: HCA316

<b>Description:</b>	HUMAN ANTI RANIBIZUMAB
<b>Specificity:</b>	RANIBIZUMAB
<b>Other names:</b>	Lucentis
<b>Format:</b>	Purified
<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 supplied as a 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 0.5 mg/ml
<b>Immunogen</b>	Ranibizumab

### Specificity

**Human Anti-Ranibizumab Antibody, clone AbD29858\_hIgG1** 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\_hIgG1 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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<b>Affinity</b>	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.
<b>ELISA</b>	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: <a href="#">PK antigen capture ELISA to measure free drug</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. Lucentis is a trademark of Genentech.
<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
<b>Technical Advice</b>	Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a>

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

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

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

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