

Datasheet: HCA306

**BATCH NUMBER 169218**

<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
<b>Isotype:</b>	HuCAL Fab monovalent
<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

A monovalent human recombinant Fab (lambda light chain) selected from the HuCAL phage display library, expressed in *E. coli*. The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

### Preparation

Metal chelate affinity chromatography

### Source

*E.coli*

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)

### Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

**Immunogen**

Ranibizumab

**Specificity**

**Human Anti-Ranibizumab Antibody, clone AbD29858** is a non-inhibitory, anti-idiotypic antibody in monovalent Fab 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 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](#)

**Affinity**

The intrinsic affinity of the monovalent form of Human anti Ranibizumab antibody, clone AbD29858 is  $K_D=18$  nM as measured by real time, label-free molecular interaction analysis on immobilized VEGF/ranibizumab complex.

**ELISA**

Human ANTI Ranibizumab antibody, clone AbD29858 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](#).

**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

**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](http://bio-rad.com/en-us/trademarks) for details.

Lucentis is a trademark of Genentech

His-tag is a trademark of EMD Biosciences.

---

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/HCA306>  
10040

---

**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

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

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

**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)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

'M430123:240503'

**Printed on 29 Aug 2024**

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)