

Datasheet: HCA306

Description:	HUMAN ANTI RANIBIZUMAB
Specificity:	RANIBIZUMAB
Other names:	Lucentis
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD29858
Isotype:	HuCAL Fab monovalent
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

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 (NaN₃)

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

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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

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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

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

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

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