Datasheet: HCA304

BATCH NUMBER 1805

Description:	HUMAN ANTI RANIBIZUMAB (DRUG/TARGET COMPLEX)
Specificity:	RANIBIZUMAB DRUG/TARGET COMPLEX
Other names:	Lucentis
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD29928
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 (kappa 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

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.01% Thiomersal

Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

Immunogen

Ranibizumab

Specificity	**Human Anti-Ranibizumab Antibody, clone AbD29928** specifically recognizes the Fab fragment antibody drug ranibizumab when in complex with its target, human vascular endothelial growth factor A (VEGF-A). The antibody does not recognize free ranibizumab or unbound recombinant human VEGF-A. It can be used to measure levels of ranibizumab and biosimilars in patient samples. Clone AbD29928 is a monovalent Fab format antibody that can be used to develop a pharmacokinetic (PK) antigen capture assay to measure free ranibizumab captured via immobilized VEGF-A. This antibody also recognizes bevacizumab when in complex with human 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 monovalent intrinsic affinity of AbD29928 was measured as K_D=1 nM by real time, label-free molecular interaction analysis on immobilized VEGF/ranibizumab complex.
ELISA	Clone AbD29928 is recommended for use as the detection reagent in an antigen capture assay to measure free ranibizumab captured via immobilized VEGF Protocol: PK antigen capture ELISA to measure free drug
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	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.
Guarantee	12 months from date of despatch
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 His-tag is a trademark of EMD Biosciences.

Health And Safety Information	Material Safety Datasheet documentation #10094 available at: https://www.bio-rad-antibodies.com/SDS/HCA304 10094
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 Secondary Antibodies

Rat Anti Synthetic Peptide DYKDDDDK TAG (MCA4764...) HRP

Recommended Useful Reagents

HISPEC ASSAY DILUENT (BUF049A)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: 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

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