

# Datasheet: HCA184G

Description:	HUMAN ANTI BEVACIZUMAB		
Specificity:	BEVACIZUMAB		
Other names:	AVASTIN		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	AbD16748_hlgG1		
Isotype:	lgG1		
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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**

Human IgG1 antibody (kappa light chain) selected from the HuCAL phage display library and expressed in a human cell line. This antibody is supplied as a liquid.

Preparation	Purified IgG prepared by affinity chromatography on Protein A
Source	HKB-11
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )
Approx. Protein Concentrations	Antibody concentration 1.0 mg/ml
Immunogen	Bevacizumab

#### **Specificity**

**Human Anti-Bevacizumab Antibody, clone AbD16748\_IgG1** is a paratope-specific, recombinant anti-idiotypic antibody that specifically recognizes the humanized monoclonal antibody drug bevacizumab and inhibits the binding of the drug to its target, vascular endothelial growth factor A (VEGF-A). The antibody can be used to measure the levels of bevacizumab and biosimilars in serum from patients.

A pair of anti-bevacizumab antibodies can be used to develop a pharmacokinetic (PK) bridging ELISA to measure free drug. This antibody is recommended as the detection antibody, paired with Anti-Bevacizumab Antibody in monovalent Fab format, clone AbD17976 (HCA182) as the capture antibody.

Bevacizumab (reference product branded as Avastin) is a humanized monoclonal antibody (IgG1/kappa) that inhibits angiogenesis by binding to VEGF-A. VEGF-A is a potent stimulator of angiogenesis of both normal and cancerous cells, and acts as a regulator of vasculogenesis. Bevacizumab is used to treat various cancers, including colorectal, lung, breast, glioblastoma, kidney and ovarian.

### View a summary of all Anti-Bevacizumab Antibodies.

# Purity

97.8% (capillary electrophoresis, reducing conditions)

#### **Affinity**

The intrinsic affinity of the monovalent form of this antibody is K<sub>D</sub>=2.1nM as measured by real time, label-free molecular interaction analysis on immobilized Bevacizumab.

#### **ELISA**

This product may be used in a direct ELISA or as a detection reagent in a sandwich ELISA, when conjugated to HRP, together with  $\underline{\mathsf{HCA182}}$  as the capture reagent.

Protocol: PK bridging ELISA to measure free drug

This antibody is fully human and can be used as a reference standard in an ADA assay. Protocol: ADA bridging ELISA.

#### References

- 1. Kashiwagi, N. *et al.* (2017) Method for measuring anti-drug antibody <u>US Patent Application US20170315118A1</u>
- 2. Lallemand, C. *et al.* (2020) Quantification of Bevacizumab Activity Following Treatment of Patients With Ovarian Cancer or Glioblastoma. <u>Front Immunol. 11: 515556.</u>

### 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 for details.

Avastin is a trademark of Genentech, Inc.

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA184G">https://www.bio-rad-antibodies.com/SDS/HCA184G</a> 10040
Licensed Use	For <i>in vitro</i> research purposes and for commercial applications for the provision of <i>in vitro</i> 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 <u>HuCAL Antibodies Technical Manual</u> .

# **Related Products**

# **Recommended Useful Reagents**

LYNX RAPID HRP ANTIBODY CONJUGATION KIT (LNK001P)
HUMAN ANTI BEVACIZUMAB (HCA182)
HUMAN ANTI BEVACIZUMAB (HCA185)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M430301:240503'

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