

# Datasheet: TZA051

Description:	HUMAN ANTI RAMUCIRUMAB
Specificity:	RAMUCIRUMAB
Other names:	Cyramza
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD51668
Isotype:	Fab antibody
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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		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 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 a proprietary <i>E. coli.</i> strain. The antibody is tagged with a DYKDDDDK tag, a SpyTag version 2 (VPTIVMVDAYKRYK) and a His6-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	0.0095% MIT						
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml						

Immunogen	Ramucirumab
Specificity	<b>Human Anti-Ramucirumab Antibody, clone AbD51668</b> is a paratope specific, inhibitory, anti-idiotypic antibody (Type 1) that specifically recognizes the free human monoclonal antibody drug ramucirumab, and its biosimilar products. It does not recognize the drug target, the human vascular endothelial growth factor receptor 2 (VEGFR2), nor ramucirumab in complex with VEGFR2. This antibody can be used to measure free ramucirumab levels in serum from patients.
	Clone AbD51668 is available as a monovalent Fab antibody incorporating a SpyTag at the C-terminus end of the antibody heavy chain for conversion by the end user into alternative formats using any of the <u>SpyCatchers</u> available in our catalog under product code <u>TZA051</u> . It is also available as a bivalent Fab antibody already conjugated to HRP via coupling to the HRP conjugated BiSpyCatcher2 ( <u>TZC002P</u> ) for use in direct ELISA under product code <u>TZA051P</u> .
	A pair of anti-ramucirumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug; clone AbD51668 is recommended as a detection antibody, paired with Human Anti-Ramucirumab Antibody, clone AbD51673ad ( <u>TZA050</u> ) as the capture reagent.
	Ramucirumab (trade name Cyramza) is a humanized monoclonal antibody of the IgG1/kappa isotype that binds to the extracellular VEGF-binding domain of VEGFR2 to prevent VEGF ligands to bind to VEGFR2. Ramucirumab therefore blocks the activation of VEGFR2 and the downstream angiogenesis pathways involved in tumor development and progression. Ramucirumab is indicated, alone or in combination with another drug for the treatment of advanced gastric adenocarcinoma and non-small cell lung cancer.
Affinity	The monovalent intrinsic affinity of AbD51668ad was measured as $K_D = 1 \text{ nM}$ by real time, label free molecular interaction analysis on immobilized ramucirumab.
ELISA	Clone AbD51668ad can be used in indirect ELISA to detect ramucirumab. It can also be used as a detection antibody to develop a pharmacokinetic (PK) bridging ELISA for ramucirumab, together with <u>TZA050</u> as the capture reagent. Note that both TZA050 (capture) and TZA051 (detection) contain the same peptide tags. Therefore, using anti-tag antibodies for detecting TZA051 is not possible.
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. His-tag is a registered trademark of EMD Biosciences. Cyramza is a trademark of Eli Lilly.		
Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA051 20479		
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 for coupling a Fab antibody with a SpyTag to a SpyCatcher can be found at <u>SpyTag and SpyCatcher Products</u> , and further information about HuCAL recombinant antibody technology can be found in the <u>HuCAL Antibodies Technical Manual</u>		

## **Related Products**

### **Recommended Useful Reagents**

HISPEC ASSAY DILUENT (BUF049A) LYNX RAPID HRP ANTIBODY CONJUGATION KIT (LNK002P) SpyTag3 PEPTIDE (BLP086) HUMAN ANTI RAMUCIRUMAB (DRUG/TARGET COMPLEX) (TZA053) HUMAN ANTI RAMUCIRUMAB (DRUG/TARGET COMPLEX):HRP (TZA053P) HUMAN ANTI RAMUCIRUMAB (HCA407) HUMAN ANTI RAMUCIRUMAB (HCA408) HUMAN ANTI RAMUCIRUMAB (HCA409) HUMAN ANTI RAMUCIRUMAB (TZA050) HUMAN ANTI RAMUCIRUMAB (TZA051P)

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	Email: antibody_sales_us@bio-ra	ad.com	Email: antibody_sales_uk@bio-ra	ad.com	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 'M433159:240920'

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