

Datasheet: TZA053P

**BATCH NUMBER 168732**

<b>Description:</b>	HUMAN ANTI RAMUCIRUMAB (DRUG/TARGET COMPLEX):HRP
<b>Specificity:</b>	RAMUCIRUMAB DRUG/TARGET COMPLEX
<b>Other names:</b>	Cyramza
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD53034
<b>Isotype:</b>	Fab antibody
<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 bivalent human recombinant Fab (lambda light chain) generated by coupling of the monovalent SpyTagged Fab [TZA053](#) with a HRP conjugated BiSpyCatcher version 2 ([TZC002P](#)). The coupled antibody has two DYKDDDDK tags and three His6-tags. It contains SpyTag3 peptide ([BLP086](#)) in 5-fold molar excess to block any unreacted Catcher sites. 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

Antibody concentration 0.5 mg/ml

## Concentrations

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**Immunogen** Ramucirumab/VEGFR2 complex

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**Specificity** **Human Anti-Ramucirumab (Drug/Target Complex) Antibody, clone AbD53034** specifically recognizes the antibody drug ramucirumab when in complex with its target, the human vascular endothelial growth factor receptor 2 (VEGFR2). It does not recognize free ramucirumab nor unbound VEGFR2.

The monovalent Fab format of this antibody, clone AbD53034ad (**TZA053**) is tagged with a SpyTag2 at the C-terminus of the Fab heavy chain, enabling the user to couple it to a [SpyCatcher reagent](#) for conversion to alternative formats in less than one hour.

This antibody is also available as a bivalent Fab antibody pre-coupled to the HRP-conjugated BiSpyCatcher2 ([TZC002P](#)) under product code **TZA053P** for direct detection of the Ramucirumab/VEGFR2 complex in bioanalysis assays.

Clone AbD53034 can be used in pharmacokinetic (PK) antigen capture format assays to measure ramucirumab that has been captured via immobilized VEGFR2. It is ideal for bioanalytical assays to measure the level of drug or biosimilar in complex with the VEGFR2 target.

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.

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**Affinity** The monovalent intrinsic affinity of AbD53034pap was measured as  $K_D = 1$  nM by real time, label free molecular interaction analysis on immobilized human VEGFR2-His/ramucirumab complex.

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**ELISA** Clone AbD53034pap may be used in a direct ELISA to detect the VEGFR2/ramucirumab complex or as detection reagent for ramucirumab captured via immobilized VEGFR2.

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**Storage** This product is shipped frozen.  
When ready to use, thaw and aliquot the sample as needed. Store aliquots at -70°C, if available, otherwise store at -20°C. It is not recommended to keep aliquots at 4°C for more than one week.

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**Guarantee** 12 months from date of despatch

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His-tag is a registered trademark of EMD Biosciences.  
Cyramza is a trademark of Eli Lilly.

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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20479 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZA053P">https://www.bio-rad-antibodies.com/SDS/TZA053P</a>
<b>Licensed Use</b>	For <i>in vitro</i> research purposes only, unless otherwise specified in writing by Bio-Rad.
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	Recommended protocols for coupling a Fab antibody with a SpyTag to a SpyCatcher can be found at <a href="#">SpyTag and SpyCatcher Products</a> , and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a>

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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