

## Datasheet: TZA013P

**BATCH NUMBER 166515**

<b>Description:</b>	HUMAN ANTI ATEZOLIZUMAB (DRUG/TARGET COMPLEX):HRP
<b>Specificity:</b>	ATEZOLIZUMAB DRUG/TARGET COMPLEX
<b>Other names:</b>	Tecentriq
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD40640
<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 [TZA013](#) 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** Atezolizumab/PD-L1 complex

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**Specificity** **Human Anti-Atezolizumab (Drug/Target Complex) Antibody, clone AbD40640** specifically recognizes the antibody drug atezolizumab when in complex with its target PD-L1 (programmed cell death ligand 1). It does not recognize free atezolizumab nor unbound PD-L1. It can be used to measure levels of atezolizumab in patient samples.

This TrailBlazer Antibody is available in a purified monovalent Fab format tagged with a SpyTag2 at the C terminus of the Fab antibody heavy chain ([TZA013](#)), enabling the user to couple it to a SpyCatcher reagent for conversion to alternative formats in less than one hour. It is also available as a bivalent Fab format pre-coupled to the an HRP-conjugated BiSpyCatcher2 for direct detection of atezolizumab under product code [TZA013P](#).

[View a summary of all SpyCatcher products](#)

Either format can be used to develop a pharmacokinetic (PK) antigen capture assay to measure free atezolizumab captured on immobilized PD-L1.

Atezolizumab (brand name Tecentriq®) is a human monoclonal IgG1 antibody that binds directly to Programmed Death Ligand 1 (PD-L1, CD274) and provides a dual blockade of both the PD-1 and B7.1 receptors on T-cells and antigen presenting cells. It is one of the named “checkpoint inhibitor” drugs. PD-L1/PD-1 mediated inhibition of the immune response is thereby released, including reactivation of the anti-tumour immune response without induction of antibody-dependent cellular cytotoxicity. The drug is used to treat urothelial carcinoma, non-small cell lung cancer, triple-negative breast cancer, small cell lung cancer and hepatocellular carcinoma. It is used either on its own or in combination for cancers which are advanced or metastatic.

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**Affinity** The monovalent intrinsic affinity of AbD40640pap was measured as  $K_D = 91$  nM by real time, label free molecular interaction analysis on immobilized PD-L1/atezolizumab complex.

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**ELISA** Clone AbD40640pap may be used in a direct ELISA to detect the atezolizumab/PD-L1 complex or to detect atezolizumab bound to immobilized PD-L1.

Protocol: [PK Antigen Capture ELISA](#)

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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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**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.  
Tecentriq is a trademark of Roche/ Genentech.

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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/TZA013P">https://www.bio-rad-antibodies.com/SDS/TZA013P</a> 20479
<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>

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## Related Products

### Recommended Useful Reagents

[HISPEC ASSAY DILUENT \(BUF049A\)](#)  
[HUMAN ANTI ATEZOLIZUMAB \(DRUG/TARGET COMPLEX\) \(TZA013\)](#)  
[HUMAN ANTI ATEZOLIZUMAB \(TZA011\)](#)  
[HUMAN ANTI ATEZOLIZUMAB \(HCA380\)](#)  
[HUMAN ANTI ATEZOLIZUMAB \(HCA381\)](#)  
[HUMAN ANTI ATEZOLIZUMAB \(HCA382\)](#)

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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](https://bio-rad-antibodies.com/datasheets)  
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