

Datasheet: TZA013

Description:	HUMAN ANTI ATEZOLIZUMAB (DRUG/TARGET COMPLEX)
Specificity:	ATEZOLIZUMAB DRUG/TARGET COMPLEX
Other names:	Tecentriq
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD40640
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 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 (lambda light chain) selected from the HuCAL® phage display library, expressed in a proprietary *E. coli* 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

Atezolizumab/PD-L1 complex

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.

Affinity

The monovalent intrinsic affinity of AbD40640ad was measured as $K_D = 91$ nM by real time, label free molecular interaction analysis on immobilized PD-L1/atezolizumab complex.

ELISA

Clone AbD40640ad may be used in an indirect ELISA to detect the atezolizumab/PD-L1 complex or to detect atezolizumab bound to immobilized PD-L1.

Protocol: [PK Antigen Capture ELISA](#)

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.
Tecentriq is a trademark of Roche/ Genentech.

Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA013 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 SpyTag and SpyCatcher Products , and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual

Related Products

Recommended Useful Reagents

[HISPEC ASSAY DILUENT \(BUF049A\)](#)

[SpyTag3 PEPTIDE \(BLP086\)](#)

[BiSpyCatcher2:Biotin \(TZC002B\)](#)

[BiSpyCatcher2:HRP \(TZC002P\)](#)

[HUMAN ANTI ATEZOLIZUMAB \(TZA011\)](#)

[HUMAN ANTI ATEZOLIZUMAB \(HCA380\)](#)

[HUMAN ANTI ATEZOLIZUMAB \(HCA381\)](#)

[HUMAN ANTI ATEZOLIZUMAB \(HCA382\)](#)

[HUMAN ANTI ATEZOLIZUMAB \(DRUG/TARGET COMPLEX\):HRP \(TZA013P\)](#)

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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://www.bio-rad-antibodies.com/datasheets)
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