

Datasheet: TZA011

BATCH NUMBER 166027

Description:	HUMAN ANTI ATEZOLIZUMAB
Specificity:	ATEZOLIZUMAB
Other names:	Tecentriq
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD40638
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 (kappa 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

Specificity

Human Anti-Atezolizumab Antibody, clone AbD40638 is a paratope specific, inhibitory anti-idiotypic antibody (Type 1) that specifically recognizes the free monoclonal antibody drug atezolizumab. This is a humanized, Fc-engineered IgG1/kappa antibody with allotype nG1m1. The CH2 domain was engineered with one amino acid substitution (N298A) resulting in a non-glycosylated antibody, to impair Fcγ receptor binding and to prevent Fc-mediated depletion of cells expressing PD-L1. The antibody does not recognize free PD-L1 nor atezolizumab in complex with PD-L1.

Anti-Atezolizumab monovalent Fab antibody TZA011 has a SpyTag incorporated for conversion by the user into alternative antibody formats using any of the SpyCatchers available in our catalog.

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

Clone AbD40638 is also available in full length IgG1 format under product code [HCA382](#).

Anti-Atezolizumab monovalent Fab antibody TZA011 may be used as the capture antibody for atezolizumab in a PK bridging ELISA together with [HCA381](#), clone AbD40992ia as the detection antibody to measure free atezolizumab captured via immobilized PD-L1.

[PK bridging ELISA](#)

Atezolizumab (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.

[View a summary of all anti-atezolizumab antibodies](#)

Affinity

The monovalent intrinsic affinity of AbD40638ad was measured as $K_D = 0.4$ nM by real time, label free molecular interaction analysis on immobilized atezolizumab.

ELISA

Clone AbD40638ad can be used as the capture antibody for atezolizumab in a PK ELISA together with [HCA381](#) as the detection antibody.

[PK bridging 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
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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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Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA011 20479
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Licensed Use	For in vitro research purposes and for commercial applications for the provision of in vitro 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.
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Regulatory	For research purposes only
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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
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Related Products

Recommended Useful Reagents

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

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

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

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

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

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

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

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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