

Datasheet: HCA382

**BATCH NUMBER 166026**

<b>Description:</b>	HUMAN ANTI ATEZOLIZUMAB
<b>Specificity:</b>	ATEZOLIZUMAB
<b>Other names:</b>	Tecentriq
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD40638ia
<b>Isotype:</b>	IgG1
<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.

<b>Product Form</b>	Human IgG1 antibody (kappa light chain) selected from the HuCAL phage display library and expressed in a human cell line. This antibody is supplied as a liquid.
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Source</b>	HKB-11
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.5 mg/ml
<b>Immunogen</b>	Atezolizumab

**Specificity**

**Human Anti-Atezolizumab Antibody, clone AbD40638ia** 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.

Clone AbD40638ia is a fully human recombinant monoclonal antibody with IgG1 isotype and can be used as a surrogate positive control or reference standard in an anti-drug antibody (ADA) assay. This antibody has a monovalent intrinsic affinity of 0.4 nM, and is one of three Type 1 antibodies with different affinities offered for ADA assays.

[ADA bridging ELISA](#)

Clone AbD40638ia is also available in a monovalent Fab format with a SpyTag as [TZA011](#).

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](#)

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**Affinity**

The intrinsic affinity of the monovalent form of Human anti Atezolizumab antibody, clone AbD40638ia is  $K_D = 0.4$  nM as measured by real time, label free molecular interaction analysis on immobilized Atezolizumab.

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**ELISA**

Human anti Atezolizumab antibody, clone AbD40638ia can be used in a direct and indirect ELISA. It can also be used as a calibrator in an anti-drug (ADA) antibody assay.

Protocol: [ADA bridging ELISA](#).

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**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.

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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](https://www.bio-rad.com/en-us/trademarks) for details.  
Tecentriq is a trademark of Roche/ Genentech..

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/HCA382>  
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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 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 \(TZA011\)](#)

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