

Datasheet: HCA381

BATCH NUMBER 166025

Description:	HUMAN ANTI ATEZOLIZUMAB
Specificity:	ATEZOLIZUMAB
Other names:	Tecentriq
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD40992ia
Isotype:	IgG1
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	Human IgG1 antibody (lambda light chain) selected from the HuCAL phage display library and expressed in a human cell line. This antibody is supplied as a liquid.
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Source	HKB-11
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml
Immunogen	Atezolizumab

Specificity

Human Anti-Atezolizumab Antibody, clone AbD40992ia 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 AbD40992ia is a fully human recombinant monoclonal antibody with IgG1 isotype. It can be used in a direct or indirect ELISA, or as a detection reagent for atezolizumab in a PK bridging ELISA together with [TZA011](#) (AbD40638ad) as the capture reagent, or to develop and calibrate anti drug antibody (ADA) assays to measure the ADA response in patient sera together with [HCA380](#) and [HCA382](#). This antibody has a monovalent intrinsic affinity of 1.4 nM.

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 intrinsic affinity of the monovalent form of Human anti Atezolizumab antibody, clone AbD40992ia is $K_D = 1.4$ nM as measured by real time, label free molecular interaction analysis on immobilized Atezolizumab.

ELISA

This product may be used in a direct or indirect ELISA or as a detection reagent for atezolizumab in a PK bridging ELISA together with [TZA011](#) (AbD40638ad) as the capture reagent.

Protocol: [PK bridging ELISA](#)

It can also be used to develop and calibrate anti drug antibody (ADA) assays to measure the ADA response in patient sera together with [HCA380](#) and [HCA382](#)

Protocol: [ADA 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
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. Tecentric is a trademark of Roche/ Genentech.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/HCA381 10040
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 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 \(BUF049A\)](#)

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

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

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

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

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