

Datasheet: TZA040P

Description:	HUMAN ANTI AVELUMAB:HRP
Specificity:	AVELUMAB
Other names:	Bavencio
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	AbD40519
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 bivalent human recombinant Fab (lambda light chain) generated by coupling of the monovalent SpyTagged Fab [TZA040](#) 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 Concentrations

Antibody concentration 0.5 mg/ml

Immunogen

Avelumab

Specificity

Human Anti-Avelumab Antibody, clone AbD40519 is a paratope specific, inhibitory anti-idiotypic antibody (Type 1) that specifically recognizes the free human monoclonal antibody drug avelumab. The antibody does not recognize free PD-L1 nor avelumab in complex with PD-L1. This antibody can be used to measure free avelumab levels in serum from patients.

TZA040 is available in three formats: as a full length IgG1 antibody ([HCA396](#)) for use in ADA assays, as well as two formats incorporating a SpyTag: a monovalent recombinant Fab format ([TZA040](#)), and a bivalent SpyTag Fab format ([TZA040P](#)) coupled with a HRP conjugated BiSpyCatcher2 ([TZC002P](#)). Either Fab format can be used to develop a pharmacokinetic (PK) bridging ELISA to measure free avelumab captured via immobilized PD-L1.

Anti-Avelumab monovalent Fab antibody TZA040 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](#)

Avelumab (Bavencio) is a human IgG1/lambda antibody with allotype IGHG1*05 (G1m17,1). It binds to programmed death-ligand 1 (PD-L1, CD274) on tumor cells, blocking its interaction with PD-1 and B7-1 receptors on T-lymphocytes. PD-L1 is an immune checkpoint protein expressed on tumor cells and tumor-infiltrating immune cells that down regulates T-cell function, so by blocking these receptors anti-tumor T-cell activity can be restored. In vitro, the drug has been shown to stimulate natural killer cell-mediated direct tumor cell lysis by inducing antibody-dependent cell-mediated cytotoxicity. Avelumab has been approved both as monotherapy for the treatment of adult patients with metastatic Merkel cell carcinoma (MCC) and for the treatment of advanced Renal Cell Carcinoma (RCC).

Affinity

The monovalent intrinsic affinity of AbD40519pap was measured as $K_D = 0.9$ nM by real time, label free molecular interaction analysis on immobilized avelumab.

ELISA

Clone AbD40519pap can be used as the detection antibody for avelumab in a PK ELISA together with [TZA041](#) as the capture antibody.

Protocol: [PK bridging ELISA](#)

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.

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.

Bavencio is a registered trademark of Merck Serono (Pfizer as co-developer).

Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA040P 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 \(BUF049A\)](#)

[HUMAN ANTI AVELUMAB \(HCA396\)](#)

[HUMAN ANTI AVELUMAB \(HCA397\)](#)

[HUMAN ANTI AVELUMAB \(HCA398\)](#)

[HUMAN ANTI AVELUMAB \(TZA040\)](#)

[HUMAN ANTI AVELUMAB \(TZA041\)](#)

[HUMAN ANTI AVELUMAB \(DRUG/TARGET COMPLEX\) \(TZA042\)](#)

[HUMAN ANTI AVELUMAB \(DRUG/TARGET COMPLEX\):HRP \(TZA042P\)](#)

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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

'M430260:240503'

Printed on 03 May 2024

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