

Datasheet: TZA002

Description:	HUMAN ANTI DURVALUMAB (DRUG/TARGET COMPLEX)
Specificity:	DURVALUMAB DRUG/TARGET COMPLEX
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD41240
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.

Target Species	Drug
Product Form	A monovalent human recombinant Fab (lambda light chain) selected from the HuCAL® phage display library, expressed in a proprietary <i>E. coli</i> 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
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.0095% MIT
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml
Immunogen	Durvalumab

Specificity**Human Anti-Durvalumab (Drug/Target Complex) Antibody, clone AbD41240**

specifically recognizes the antibody drug durvalumab when in complex with its target, PD-L1 (programmed cell death ligand 1). The antibody does not recognize free durvalumab nor unbound recombinant human PD-L1. It can be used to measure levels of durvalumab in patient samples.

Anti-Durvalumab monovalent Fab antibody TZA002 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](#)

Anti-Durvalumab monovalent Fab antibody TZA002 can be used to develop a pharmacokinetic (PK) antigen capture assay to measure free durvalumab captured via immobilized PD-L1.

[PK bridging ELISA](#)

Durvalumab (Imfinzi) is a human IgG1/kappa antibody with allotype G1m3. The CH2 domain was engineered with three amino acid substitutions (L238F, L239E, P335S) to reduce the Fc-mediated effector functions to prevent depletion of PD-L1+ T-cells. It was first approved for previously treated patients with advanced bladder cancer. It was later approved for the treatment of unresectable stage 3 NSCLC (Non-Small Cell Lung Cancer) and ES-SCLC. Durvalumab binds to PD-L1 to block the interaction with the inhibitory T cell receptor PD-1. This blockade removes the suppression of T-cells that are specific for MHC-1-presented neoepitopes on tumor cells. Removal of this inhibitory signal leads to the release of granzymes and perforins by the activated T-cells, and finally to the destruction of the tumor cells.

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

Affinity

The monovalent intrinsic affinity of AbD41240ad was measured as $K_D = 13$ nM by real time, label free molecular interaction analysis on immobilized PD-L1/dupilumab complex.

ELISA

Clone AbD41240ad can be used as the detection antibody in a PK bridging assay to measure durvalumab in complex with PD-L1.

Protocol: [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

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.
Imfinzi is a trademark of Medimmune/AstraZeneca using Abgenix's XenoMouse® technology.

Health And Safety Information Material Safety Datasheet documentation #20479 available at:
20479: <https://www.bio-rad-antibodies.com/uploads/MSDS/20479.pdf>

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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

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

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

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

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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