

## Datasheet: TZA002P

<b>Description:</b>	HUMAN ANTI DURVALUMAB (DRUG/TARGET COMPLEX):HRP
<b>Specificity:</b>	DURVALUMAB DRUG/TARGET COMPLEX
<b>Other names:</b>	Imfinzi
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD41240
<b>Isotype:</b>	Fab antibody
<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.

### Product Form

A bivalent human recombinant Fab (lambda light chain) generated by coupling of the monovalent SpyTagged Fab [TZA002](#) with a HRP conjugated BiSpyCatcher version 2. 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**PD-L1/Durvalumab complex

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**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.

This TrailBlazer Antibody is available in two different formats, monovalent Fab unconjugated (TZA002) and bivalent Fab conjugated to HRP (TZA002P). The monovalent recombinant Fab antibody has a SpyTag incorporated, which is used to create the bivalent format by coupling two SpyTagged Fab antibodies to an HRP conjugated BiSpyCatcher2 ([TZC002P](#)). Either format can be used to develop a pharmacokinetic (PK) antigen capture assay to measure free durvalumab captured via immobilized PD-L1.

The antibody is tagged with a SpyTag2 at the C-terminus of the Fab antibody heavy chain, enabling the user to couple it to any of the SpyCatchers in our catalog for conversion to alternative formats in less than one hour.

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

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 AbD41240pap was measured as  $K_D = 13$  nM by real time, label free molecular interaction analysis on immobilized durvalumab in complex with PD-L1.

**ELISA**

Clone AbD41240pap can be used in a pharmacokinetic (PK) antigen capture ELISA to measure durvalumab captured via immobilized human PD-L1 or to measure the level of durvalumab/PD-L1 complex.

Protocol: [PK Antigen Capture 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.

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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](http://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

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**Health And Safety Information** Material Safety Datasheet documentation #20479 available at: <https://www.bio-rad-antibodies.com/SDS/TZA002P>  
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**Licensed Use** For *in vitro* research purposes only, unless otherwise specified in writing by 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

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

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

[HUMAN ANTI DURVALUMAB \(DRUG/TARGET COMPLEX\) \(TZA002\)](#)

[HUMAN ANTI DURVALUMAB \(HCA359\)](#)

[HUMAN ANTI DURVALUMAB \(HCA360\)](#)

[HUMAN ANTI DURVALUMAB \(TZA004\)](#)

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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](http://bio-rad-antibodies.com/datasheets)  
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