

Datasheet: TZA056

Description:	HUMAN ANTI MMAE
Specificity:	MMAE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD50347ad
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 monovalent human recombinant Fab (kappa light chain) selected from the HuCAL® phage display library, expressed in a proprietary *E. coli* 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

Source

E. coli

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.0095% MIT

Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

Immunogen

Monomethyl Auristatin E (MMAE)

Specificity **Human anti-MMAE Antibody, clone AbD50347ad** recognizes the Monomethyl Auristatin E (MMAE) toxin, an antimetabolic agent which inhibits cell division by blocking the polymerization of tubulin. Because of its toxicity, MMAE is not used as a drug itself, but is rather linked to monoclonal antibodies to form an antibody-drug conjugate through a cathepsin-cleavable linker that is stable in the extracellular fluid. Upon binding into the target cell, the linker is cleaved by cathepsin, releasing the toxin in the cell and activating the antimetabolic mechanism.

This antibody is tagged with a SpyTag2 at the C-terminus of the Fab antibody heavy chain, enabling the user to couple it to a SpyCatcher reagent for conversion to alternative formats in less than one hour.

[View a summary of SpyCatcher products](#)

Human anti-MMAE Antibody, clone AbD50347ad has been shown to recognize the MMAE toxin in both free and antibody-conjugated forms. It has also been shown to cross-react with the MMAE closely related toxins MMAF and MMAD. It does not recognize unbound antibody drugs. Clone AbD50347ad can therefore be used to measure the level of several bound drug in serum from patients.

[View a summary of all MMAE antibodies](#)

Affinity The monovalent intrinsic affinity of AbD50347ad was measured as $K_D = 3$ nM by real time, label free molecular interaction analysis on immobilized brentuximab vedotin.

ELISA Clone AbD50347ad can be used as the capture antibody for MMAE toxin in its free and also in its bound form eg. brentuximab vedotin, in a PK ELISA together with [TZA057P](#) as the detection antibody.
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 $2-8^{\circ}\text{C}$ 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.

Health And Safety Information Material Safety Datasheet documentation #20479 available at: <https://www.bio-rad-antibodies.com/SDS/TZA056>
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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

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

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

[HUMAN ANTI CD30 \(BRENTUXIMAB BIOSIMILAR\) \(MCA6149\)](#)

[HUMAN ANTI BRENTUXIMAB VEDOTIN \(HCA349\)](#)

[HUMAN ANTI BRENTUXIMAB VEDOTIN \(HCA350\)](#)

[HUMAN ANTI BRENTUXIMAB VEDOTIN \(HCA351\)](#)

[HUMAN ANTI BRENTUXIMAB VEDOTIN \(HCA352\)](#)

[HUMAN ANTI MMAE \(TZA057\)](#)

[HUMAN ANTI MMAE:HRP \(TZA057P\)](#)

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