

Datasheet: TZA057

Description:	HUMAN ANTI MMAE
Specificity:	MMAE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD50348
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 <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
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 AbD50348** recognizes the Monomethyl Auristatin E (MMAE) toxin, an antimitotic 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 antimitotic 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 AbD50348 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 toxin MMAF and MMAD. It does not recognize unbound antibody drugs. Clone AbD50348 can therefore be used to measure the level of several MMAE bound drug in serum from patients.

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

Affinity	The monovalent intrinsic affinity of AbD50348ad was measured as $K_D = 5$ nM by real time, label free molecular interaction analysis on immobilized brentuximab vedotin.
ELISA	Clone AbD50348ad can be used as the detection antibody for MMAE toxin in its free and also in its coupled format eg. brentuximab vedotin, in a PK ELISA together with TZA056 as the capture antibody. Protocol: PK bridging ELISA
Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch
Acknowledgements	<p>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.</p> <p>His-tag is a registered trademark of EMD Biosciences.</p>
Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA057
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

[HUMAN ANTI MMAE \(TZA056\)](#)

[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 \(HCA352\)](#)

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

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

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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