

Datasheet: TZA057P

| Description: HUMAN ANTI MMAE:HRP Specificity: MMAE Format: HRP Product Type: Monoclonal Antibody Clone: AbD50348 Isotype: Fab antibody Quantity: 0.1 mg |                                 |                     |  |
|---|---------------------------------|---------------------|--|
| Format: HRP  Product Type: Monoclonal Antibody  Clone: AbD50348  Isotype: Fab antibody  | Description: HUMAN ANTI MMAE:HR |                     |  |
| Product Type: Monoclonal Antibody  Clone: AbD50348  Isotype: Fab antibody   | Specificity:                    | MMAE                |  |
| Clone: AbD50348 Isotype: Fab antibody   | Format:                         | HRP                 |  |
| Isotype: Fab antibody   | Product Type:                   | Monoclonal Antibody |  |
|   | Clone:                          | AbD50348            |  |
| Quantity: 0.1 mg  | 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|       | 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 (kappa light chain) generated by coupling of the monovalent SpyTagged Fab <u>TZA057</u> with a HRP conjugated BiSpyCatcher version 2 (<u>TZC002P</u>). The coupled antibody has two DYKDDDDK tags and three His6-tags. It contains SpyTag3 peptide (<u>BLP086</u>) 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<br>Stabilisers       | 0.0095% MIT                           |
| Approx. Protein<br>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, realeasing 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 AbD50348pap was measured as  $K_D = 5$  nM by real time, label free molecular interaction analysis on immobilized brentuximab vedotin.

### **ELISA**

Clone AbD50348pap 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 <u>TZA056</u> 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.

# Health And Safety Information

Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA057P

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# **Licensed Use**

For *in vitro* research purposes and for commercial applications for the provision of *in vitro* 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 <a href="SpyTag">SpyTag</a> and <a href="SpyTag">SpyCatcher Products</a> , and further information about HuCAL recombinant antibody technology can be found in the <a href="HuCAL Antibodies Technical Manual">HuCAL Antibodies Technical Manual</a> |

# Related Products

# **Recommended Useful Reagents**

HISPEC ASSAY DILUENT (BUF049A)

**HUMAN ANTI MMAE (TZA056)** 

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)** 

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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 'M430916:240614'

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