

# MMAE Antibody (69F7), mAb, Mouse

Cat. No.: A02224

## Overview

<b>Specificity</b>	The product is specific for MMAE and MMAE structurally similar molecules.
<b>Host Species</b>	Mouse
<b>Immunogen</b>	MMAE-KLH
<b>Conjugate</b>	Unconjugated

## Applications

Working concentrations for specific applications should be determined by the investigators. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

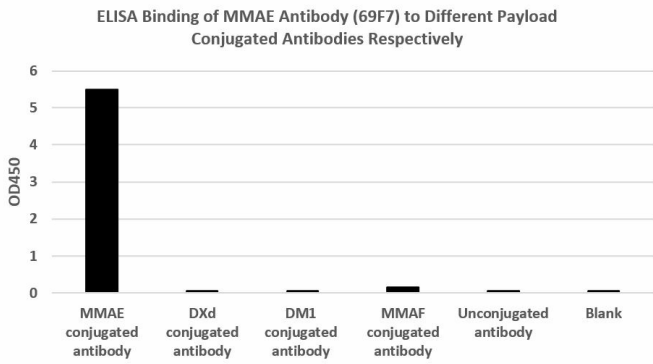
<b>Application</b>	<b>Recommended Usage</b>
ELISA	0.5-2 µg/ml
Sandwich ELISA	0.5-2 µg/ml
Competitive ELISA	0.5-2 µg/ml

## Properties

<b>Form</b>	Liquid
<b>Storage Buffer</b>	Supplied in PBS, pH 7.4, containing 0.02% ProClin300.
<b>Concentration</b>	0.5 mg/mL
<b>Storage Instructions</b>	The product remains stable for 1 year at -20°C from the date of receipt. Avoid repeated freezing and thawing cycles.
<b>Purification</b>	Protein A affinity column
<b>Isotype</b>	Mouse IgG1, κ
<b>Clonality</b>	Monoclonal
<b>Clone ID</b>	69F7F8

**Note** GenScript can customize this product per customer's request including product size, buffer components, etc.

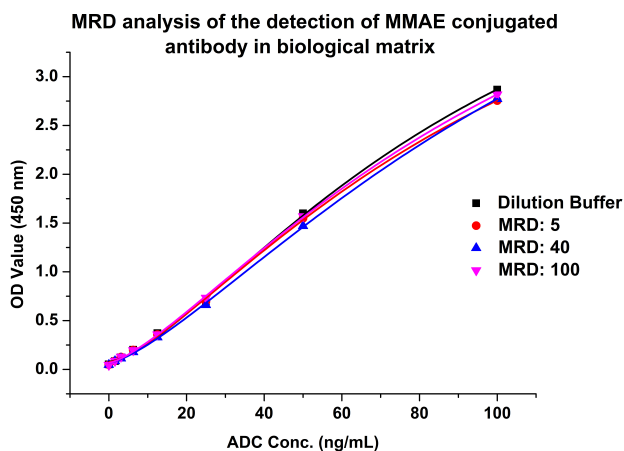
## Examples



ELISA binding of MMAE Antibody (69F7), mAb, Mouse (GenScript, A02224) with MMAE, DXd, DM1 and MMAF conjugated antibody respectively.

The coating antibody was MMAE Antibody (69F7), mAb, Mouse (GenScript, A02224) used at 2 µg/mL concentration. The primary antibody were different payload conjugated antibodies, including MMAE, DXd, DM1 and MMAF conjugated antibodies used at 1 µg/mL concentration. The secondary antibody was Mouse Anti-Human IgG Fc Antibody (50B4A9) [HRP], mAb (GenScript, A01854) used at 0.25 µg/ml concentration.

MMAE Antibody (69F7), mAb, Mouse (GenScript, A02224) is specific to MMAE and has no cross-reactivity with MMAF, DXd, and DM1.

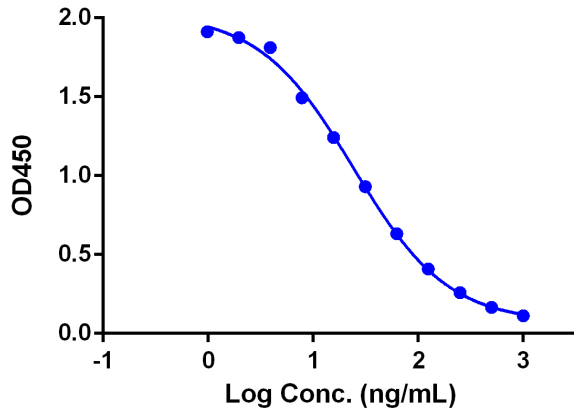


MRD analysis of the detection of MMAE conjugated antibody in biological matrix.

The MRD is the minimum dilution necessary for the detection of MMAE conjugated antibody in biological matrix with least interference. Serum samples from cynomolgus monkey were serially diluted to determine the MRD of this assay, and the test result suggested that MRD was as 1:5.

In this ELISA assay, MMAE Antibody (69F7), mAb, Mouse (GenScript, A02224) is used as the capture antibody and Mouse Anti-Human IgG Fc Antibody (50B4A9)[HRP], mAb (GenScript, A01854) is the detection antibody.

**Standard curve of MMAE Competitive ELISA**



Standard curve of MMAE Competitive ELISA.

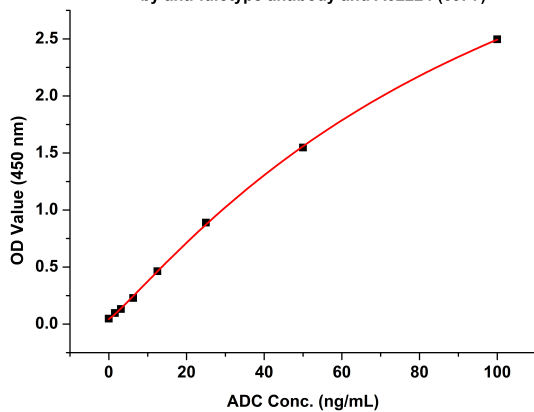
The competitive ELISA assay is developed by using free MMAE block the binding of MMAE Antibody (69F7), mAb, Mouse (GenScript, A02224) to HRP conjugated MMAE.

Capture antibody: MMAE Antibody (69F7), mAb, Mous, 2 µg/ml

Detection reagent: HRP conjugated MMAE, 2 µg/ml

Free MMAE dilution start from 1 µg/ml.

**Standard curve of MMAE conjugated antibody Sandwich ELISA by anti-idiotype antibody and A02224 (69F7)**



Standard curve of MMAE conjugated Trastuzumab Sandwich ELISA by anti-idiotype antibody and A02224 (69F7).

In this ELISA assay, MMAE Antibody (69F7), mAb, Mouse (GenScript, A02224) was coated at a concentration of 2 µg/ml, and Anti-Trastuzumab Antibody (15H2), mAb, Mouse (GenScript, A02033) conjugated with HRP was used as a detection antibody at a concentration of 0.2 µg/ml.

In this ELISA assay, a four-parameter logistic curve fitting program was used to create a standard curve with the R-Square equal to 0.99974. The typical dynamic range of the assay is 1.56-100 ng/mL and its sensitivity of detecting MMAE conjugated Trastuzumab is up to 1.56 ng/ml.

## Background

**Target Background :** Payloads are the important components of antibody-drug conjugates (ADCs). The most commonly used ADC payloads are MMAE, MMAF, DM1, and DXd. ADC pharmacokinetic (PK) studies include free payload analysis, conjugated antibody analysis, and total antibody analysis via ligand-binding assay (LBA) and LC-MS/MS assay. The anti-payload antibody is a useful reagent in PK assay for determining conjugated antibodies. It can be used as a capture antibody to determine the conjugated antibody in LBA assay or through immunocapture to enrich the ADC sample in LC-MS/MS assay. Monomethyl auristatin E (MMAE) is a synthetic antineoplastic agent. Due to its high toxicity, it cannot be administered as a standalone medication. Instead, it is conjugated with a monoclonal antibody (MAB) to specifically target cancer cells.

**Synonyms :** MMAE; Monomethyl auristatin E; Monomethylauristatin E; Monomethylauristatin norephedrine; Toxin MMAE; MMAE toxin

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**

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