Specificity

This product is a specific antibody specifically reacts with DM-1&DM-4.

Source

Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 is a Mouse monoclonal antibody produced from a hybridoma created by fusing SP2/0 myeloma and Mouse B-lymphocytes.

Isotype

Mouse IgG1 | Mouse Kappa

Conjugate

Unconjugated

Reactivity

Chemical

Immunogen

DM-1

Application

Application	Recommended Usage
ELISA	0.4-200 ng/mL

Purification

Protein A purified / Protein G purified

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

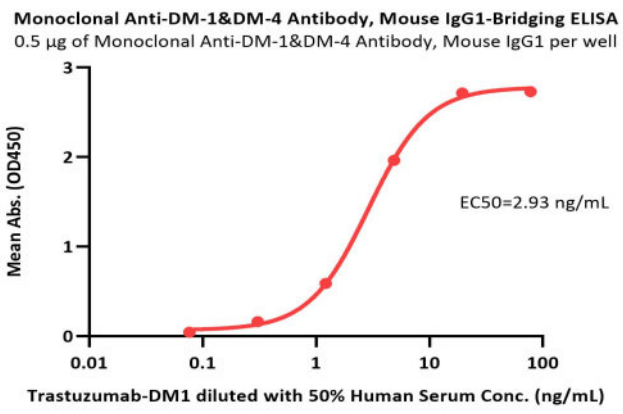
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

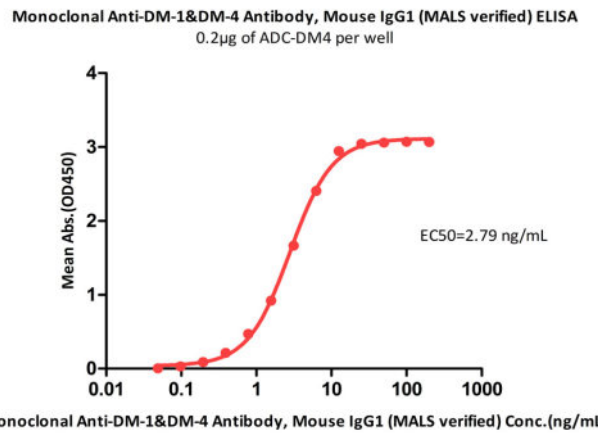
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

Bioactivity-ELISA

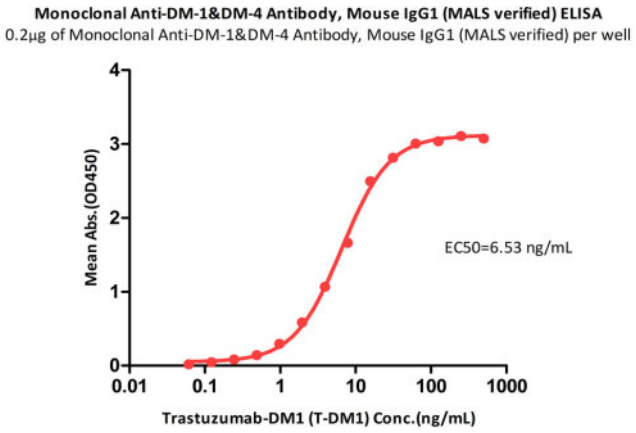


Immobilized Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73) at 5 μg/mL, add Trastuzumab-DM1 in the 50% Human serum and then add Biotinylated Human Her2, His,Avitag, premium grade (Cat. No. HE2-H82E2) at 0.5 μg/mL. Detection was performed using HRP-conjugated Streptavidin (Acro, Cat. No. STN-NH913) (QC tested).

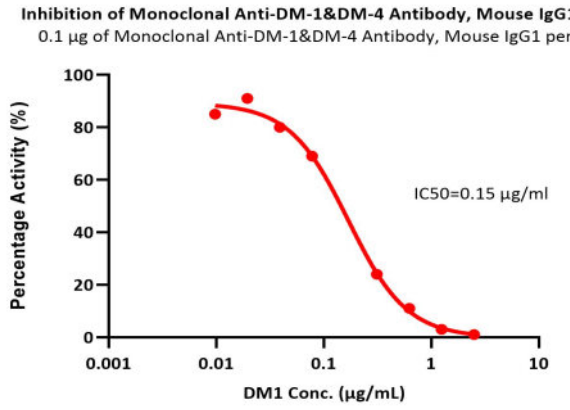


Immobilized ADC-DM4 at 2 μg/mL (100 μL/well) can bind Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73) with a linear range of 0.20-6.25ng/mL (Routinely tested).

Discounts, Gifts, and more!

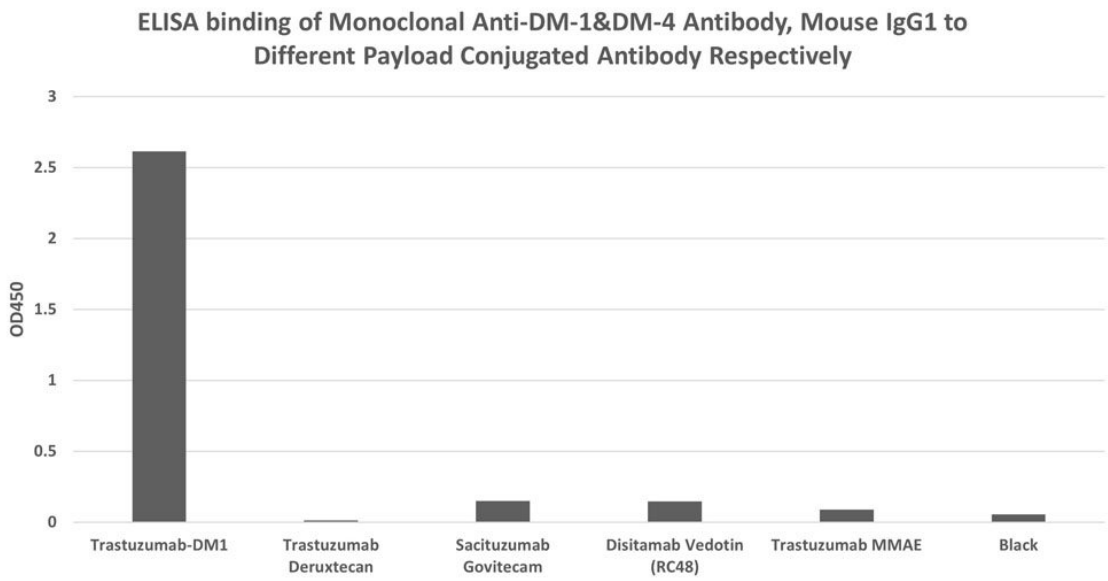


Immobilized Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73) at 2 μg/mL, add increasing concentrations of Trastuzumab-DM1 (T-DM1), and then add Biotinylated Human Her2, His,Avitag, premium grade (Cat. No. HE2-H82E2) at 8 μg/mL. Detection was performed using HRP-conjugated streptavidin with sensitivity of 0.5 ng/mL (Routinely tested).



Serial dilutions of DM1 were added into Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73): Trastuzumab-DM1 binding reactions. The half maximal inhibitory concentration (IC50) is 0.148 μg/mL (Routinely tested).

Cross Verification



ELISA binding of Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73) with Trastuzumab Deruxtecan, Sacituzumab Govitecam, Disitamab Vedotin (RC48), Trastuzumab MMAE and Trastuzumab-DM1 conjugated antibody respectively.

The coating antibody was Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73), used at 1 μg/mL concentration. The primary antibody were different payload conjugated antibodies, including Trastuzumab Deruxtecan, Sacituzumab Govitecam, Disitamab Vedotin (RC48), Trastuzumab MMAE and Trastuzumab-DM1 conjugated antibodies used at 0.5 μg/mL concentration. The secondary antibody was Peroxidase AffiniPure Goat Anti-Human IgG, Fcγ fragment specific (min X Bov, Hrs, Ms Sr Prot) (Jackson, Cat. No. 109-035-098) used at 1:12000 concentration.

Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73) is specific to Trastuzumab-DM1 and has no cross-reactivity with Trastuzumab Deruxtecan, Disitamab Vedotin (RC48), Trastuzumab MMAE and Sacituzumab Govitecam (Routinely tested).

Background

Mertansine (DM-1) is a tubulin inhibitor that binds to the ends of microtubules and inhibits microtubule dynamics. DM-1(Mertansine) has antitumor activity and functions as a regulator of tubulin. It is an alpha-amino acid ester, a carbamate, an epoxide, an organic heterocyclic tetracyclic compound, an organochlorine compound, a mercaptan, and a maydenin alkaloid. DM-1, derived from Mydenin, is a cytotoxic component of antibody-drug conjugations that produce antibody-drug conjugations via a sulfhydryl group splice with SPP (n-succinimide 4- (2-pyridyl dithio)) or SMCC (4- (3-mercapto-2, 5-dioxy-1 pyrrolidyl) -cyclohexanic acid) splice.

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