

### 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.

## **Species**

Mouse

# Isotype

Mouse IgG1 | Mouse Kappa

### Conjugate

Unconjugated

### **Antibody Type**

Hybridoma Monoclonal

### Reactivity

Chemical

#### Immunogen

DM-1.

## **Specificity**

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

## **Application**

Application	Recommended Usage
ELISA	0 4-200 ng/mL

### **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Purification**

Protein A purified/ Protein G purified

## **Formulation**

Lyophilized from 0.22  $\mu m$  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

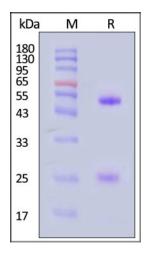
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

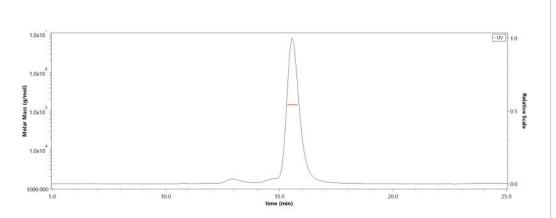
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity

# SEC-MALS



The purity of Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73) is more than 90% and the molecular weight of this protein is



# Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (MALS verified)

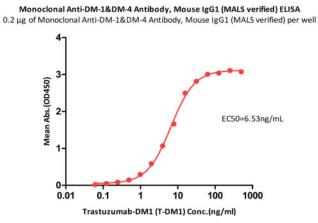
Catalog # DM1-Y73



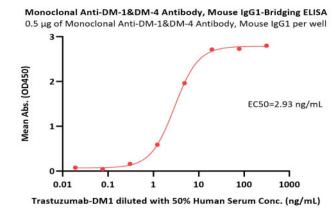
of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

around 135-155 kDa verified by SEC-MALS. Report

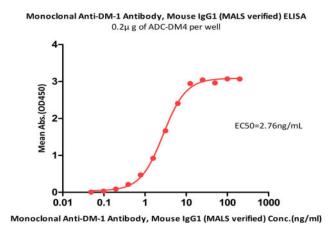
## **Bioactivity-ELISA**



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



Immobilized Monoclonal Anti-DM-1&DM-4 Antibody, Mouse IgG1 (Cat. No. DM1-Y73) at 5  $\mu$ g/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  $\mu$ g/mL. Detection was performed using HRP-conjugated Streptavidin (Acro, Cat. No. STN-NH913) (Routinely tested).



Immobilized ADC-DM4 at 2  $\mu$ g/mL (100  $\mu$ L/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).

## **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.

## **Clinical and Translational Updates**

