# Monoclonal Anti-FMC63 Antibody, Mouse IgG1 (Y45) (Carrier-free) (recommended for ADA assay)

Catalog # FM3-Y45A1





#### Source

Monoclonal Anti-FMC63 Antibody, Mouse IgG1 (Y45) (FM3-Y45A1) is a monoclonal antibody recombinantly expressed from human 293 cells (HEK293), which combines the variable region of a mouse monoclonal antibody with Mouse IgG1 constant domain.

#### **Isotype**

Mouse IgG1 / kappa

## **Specificity**

Specifically recognizes the antigen-recognition domain of FMC63 derived antibody

### Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

#### **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

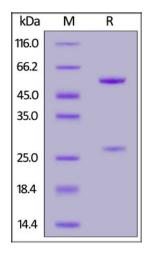
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 6 months under sterile conditions after reconstitution.

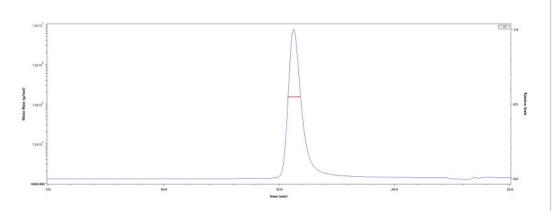
#### **SDS-PAGE**



Monoclonal Anti-FMC63 Antibody, Mouse IgG1 (Y45) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-Elisa**

### **SEC-MALS**

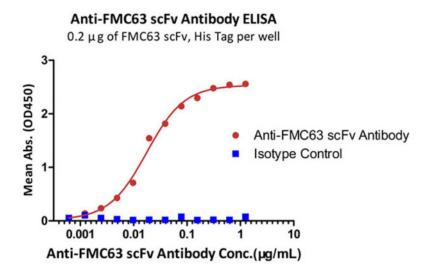


The purity of Monoclonal Anti-FMC63 Antibody, Mouse IgG1 (Y45) (Cat. No. FM3-Y45A1) is more than 95% and the molecular weight of this protein is around 140-160kDa verified by SEC-MALS.

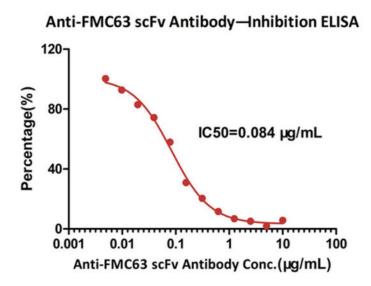
Report





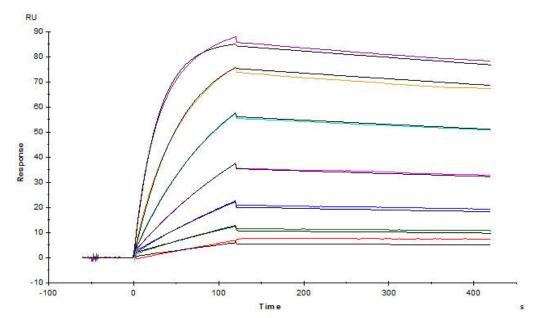


Immobilized FMC63 scFv, His Tag at 2 μg/mL (100 μL/well) can bind Monoclonal Anti-FMC63 Antibody, Mouse IgG1 (Y45) (Cat. No. FM3-Y45A1) with a linear range of 1-19 ng/mL. Mouse IgG1 Kappa Isotype Control (mAb) (Cat. No. DNP-M1) was used as an isotype control (QC tested).



ELISA analysis shows that the binding of Human CD19, Fc Tag (Cat. No. CD9-H5251) to FMC63 scFv, His Tag (Cat. No. CD9-M52Hb) was inhibited by increasing concentration of Monoclonal Anti-FMC63 Antibody, Mouse IgG1 (Y45) (Cat. No. FM3-Y45A1). The concentration of Human CD19, Fc Tag used is 5  $\mu$ g/mL (100  $\mu$ L/well). The IC50 is 0.084  $\mu$ g/mL (Routinely tested).

# **Bioactivity-SPR**



Monoclonal Anti-FMC63 Antibody, Mouse IgG1 (Y45) (Cat. No. FM3-Y45A1) captured on CM5 chip via anti-mouse antibodies surface can bind FMC63 scFv with an affinity constant of 1.08 nM as determined in a SPR assay (Routinely tested).

#### Background

FMC63 is an IgG2a mouse monoclonal antibody specific for CD19, which is a target for the immunotherapy of B lineage leukaemias and lymphomas. FMC63 scFv is the most commonly used ectodomain component of CD19-specific CARs. So far, most of reported CART19 trials contain the anti-CD19 scFv derived from FMC63, including the two FDA-approved CARs Kymriah and Yescarta.

### **Clinical and Translational Updates**

