## Biotinylated Monoclonal Anti-FMC63 Antibody, Mouse IgG1, Avitag™ (Y45)

Catalog # FM3-BY54



#### **Source**

Monoclonal Anti-FMC63 Antibody, Mouse IgG1, Avitag<sup>TM</sup> (Y45) is a mouse monoclonal antibody recombinantly expressed from human 293 cells (HEK293). Biotinylation of this antibody is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

## **Application**

Flow Cytometry (Evaluation of Anti-CD19 (FMC63 scFv) CAR Expression).

Clone

Y45

**Species** 

Mouse

Isotype

Mouse IgG1 & | kappa

**Specificity** 

Specifically recognizes the antigen-recognition domain of FMC63 derived CARs.

Immunogen

Recombinant FMC63 scFv derived from HEK293 cells.

Conjugate

Biotin

### **Isotype Control**

The Isotype control is sold separately and you can search for Cat. No. <u>DNP-BM190</u> for product information.

#### **Recommended Dilution**

1:50

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, 0.5% BSA, 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

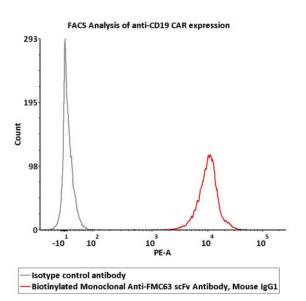
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

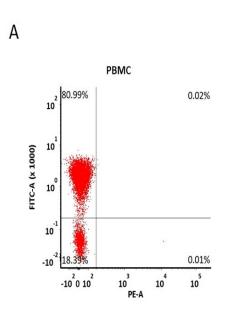
This product is stable after storage at:

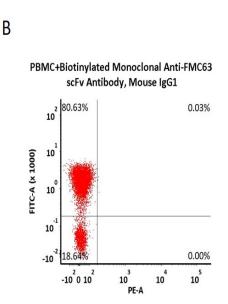
- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

## **Bioactivity-FACS**



2e5 of Anti-CD19 CAR-293 cells were stained with 100  $\mu$ L of 1:50 dilution (2  $\mu$ L stock solution in 100  $\mu$ L FACS buffer) Biotinylated Monoclonal Anti-FMC63 Antibody, Mouse IgG1, Avitag (Cat. No. FM3-BY54) and isotype control respectively, washed and then followed by PE-SA and analyzed with FACS (QC tested).





Non-specificity of Biotinylated Monoclonal Anti-FMC63 Antibody, Mouse IgG1, Avitag (Cat. No. FM3-BY54) binding to CD3+ cells present in human PBMC. Human PBMCs were simultaneously stained with FITC-labeled anti-CD3 antibody and Biotinylated Monoclonal Anti-FMC63 Antibody, Mouse IgG1, Avitag (2 µL of the antibody stock solution corresponds to labeling of



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5e5 cells in a final volume of  $100 \,\mu\text{L}$ ), washed and then analyzed with FACS. Both FITC and PE positive signals was used to evaluate the non-specific binding activity to human CD3+ cells (QC 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** 

