

Ideal Tools for Anti-CD19 CAR Expression

DMF Filed CD19 protein

- High activity verified by FACS, SPR and ELISA
- Biotinylated, fluorescent-labeled and unconjugated CD19 are available
- Suitable for detecting anti-CD19 CAR expression and PK assay



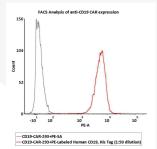


Anti-FMC63 scFv Antibody

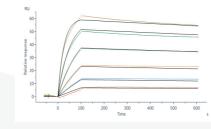
- Recognize the antigen-recognition domain of FMC63 derived anti-CD19 CARs with high sensitivity and high specificity
- Ideal for detecting FMC63 derived anti-CD19 CARs in clinical trials

CD19 protein

Detect Anti-CD19 CAR Expression by FACS

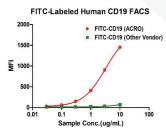


1e6 of the anti-CD19 CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) of PE-Labeled Human CD19 (20-291), His Tag (<u>Cat. No. CD9-HP2H3</u>). PE Streptavidin was used as negative control (QC tested).

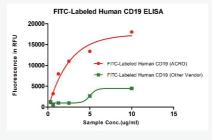


Biotinylated Human CD19 (20-291), His,Avitag (<u>Cat. No.</u> <u>CD9-H82E9</u>) captured on Biotin CAP - Series S sensor Chip can bind FMC63 MAb (mouse IgG2a) with an affinity constant of 0.255 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Higher Binding Affinity than other vendors as verified by FACS and ELISA



Binding activity of FITC-Labeled Human CD19, His Tag from two different vendors were evaluated in the flow cytometry analysis against anti-CD19-CAR-293 cells above. The result showed that ACRO's FITC-Labeled Human CD19, His Tag has a much higher binding activity than that of the other vendor.



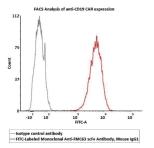
Binding activity of FITC-Labeled Human CD19, His Tag from two different vendors were evaluated in the ELISA analysis against FMC63 MAb above. The result showed that ACRO's FITC-Labeled Human CD19, His Tag has a much higher binding activity than that of the other vendor.

The affinity constant of human CD19 protein was 0.255 nM as verified by SPR



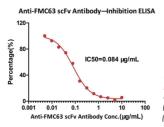
Anti-FMC63 scFv Antibody

Detect Anti-CD19 (FMC63) CAR Expression by FACS



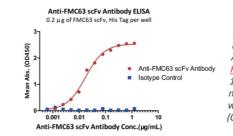
2e5 of Anti-CD19 CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) FITC-Labeled Monoclonal Anti-FMC63 scFv Antibody, Mouse IgG1 (Cat. No. FM3-FY45) and isotype control respectively. FITC signal was used to evaluate the binding activity (QC tested).

Neutralizing Activity Measured by ELISA, IC50= 0.084 µg/mL



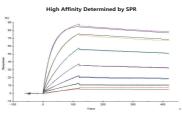
ELISA analysis shows that the binding of Human CD19, Fc Tag (Cat. No. CD9-H5251) to FMC63 scFv, His Tag was inhibited by increasing concentration of Monoclonal Anti-FMC63 scFv Antibody, Mouse IgG1 (Cat. No. FM3-Y45). The concentration of Human CD19, Fc Tag used is 5 µg/mL (100 µL/well). The IC50 is 0.084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

Binding Activity and Specificity Measured by ELISA with a linear range of 1-19 ng/mL



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

High Affinity Determined by SPR



Monoclonal Anti-FMC63 scFv Antibody, Mouse IgG1 (<u>Cat. No.</u> <u>FM3-Y45</u>) 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.

* To download the protocol of the assay, please visit www.acrobiosystems.com.

Product list

Molecul	Cat. No.	Product Description
CD19	<u>CD9-HP2H3</u>	PE-Labeled Human CD19 (20-291) Protein, His Tag
	<u>CD9-HF251</u>	FITC-Labeled Human CD19 (20-291) Protein, Fc Tag, DMF Filed
	CD9-HF2H2	FITC-Labeled Human CD19 (20-291) Protein, His Tag, DMF Filed
	<u>CD9-H82E9</u>	Biotinylated Human CD19 (20-291) Protein, His,Avitag™ (SPR verified)
	<u>CD9-H82F7</u>	Biotinylated Human CD19 (20-291) Protein, Fc,Avitag™
	<u>CD9-H8259</u>	Biotinylated Human CD19, Fc Tag, ultra sensitivity (primary amine labeling), DMF Filed
	<u>CD9-H5251</u>	Human CD19 (20-291) Protein, Fc Tag, low endotoxin (Super affinity), DMF Filed
	<u>CD9-H5259</u>	Human CD19 (20-291) Protein, Fc Tag, low endotoxin
	<u>CD9-H52H2</u>	Human CD19 (20-291) Protein, His Tag, DMF Filed
	<u>CD9-H5250</u>	Human CD19 (20-291) Protein, Llama IgG2b Fc Tag, low endotoxin
	<u>CD9-H5258</u>	Human CD19 (20-291) Protein, Mouse IgG2a Fc Tag
	<u>CD9-H5255</u>	Human CD19 (20-278) Protein, Fc Tag
	<u>CD9-C5251</u>	Cynomolgus / Rhesus macaque CD19 (20-292) Protein, Fc Tag
FMC63	<u>FM3-FY45</u>	FITC-Labeled Monoclonal Anti-FMC63 scFv Antibody, Mouse IgG1
	FM3-BY45	Biotinylated Monoclonal Anti-FMC63 scFv Antibody, Mouse IgG1
	<u>FM3-Y45</u>	Monoclonal Anti-FMC63 scFv Antibody, Mouse IgG1

* If you have used our DMF filed CD19 proteins and need to cite the DMF number to support your IND or BLA, please request for authorization.

* For more CAR-T related products, please visit here.

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