

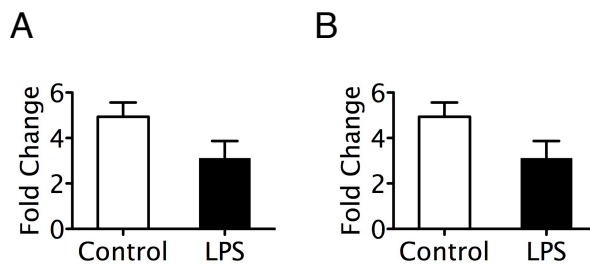
## SUPPLEMENTAL DATA

### **MiRNA-127 Inhibits Lung Inflammation by Targeting IgG Fc $\gamma$ Receptor I**

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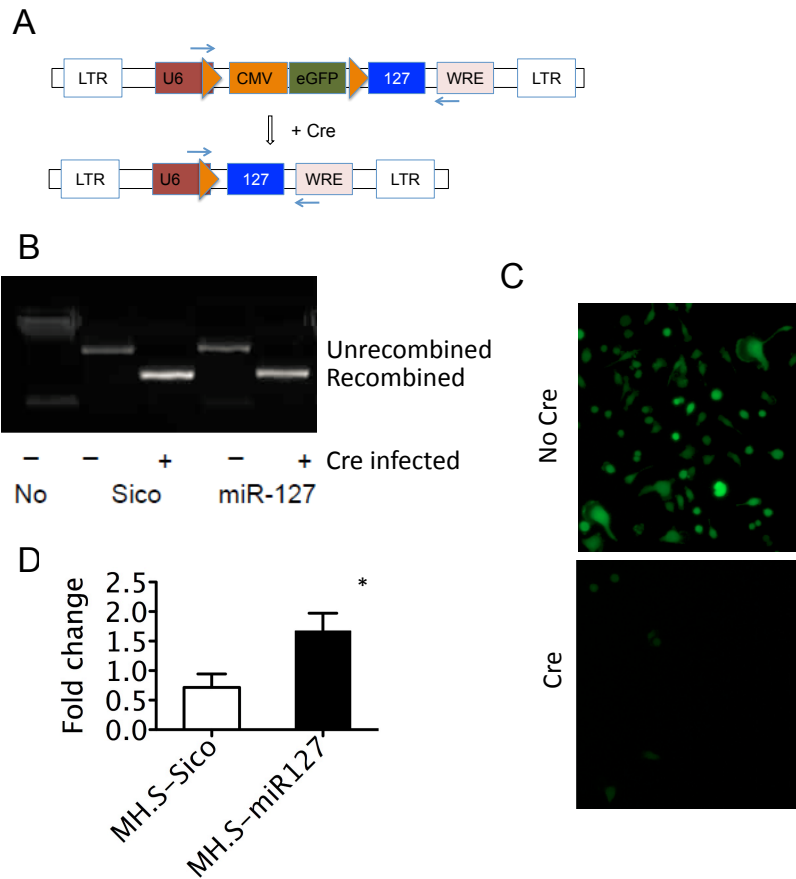
#### **Supplemental Figures and figure legends**

Fig. S1



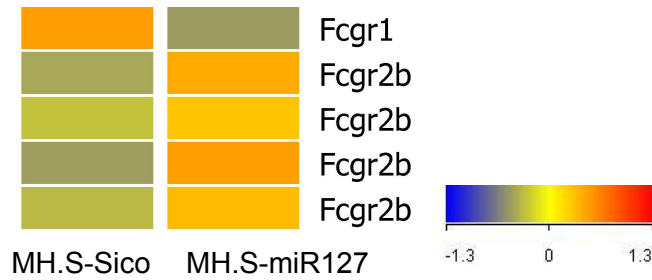
**Figure S1. LPS treatment appeared to down-regulate miR-127 in macrophages.** MiR-127 levels in MH.S cells (A) and RAW264.7 cells (B) treated with or without LPS overnight.

Fig. S2



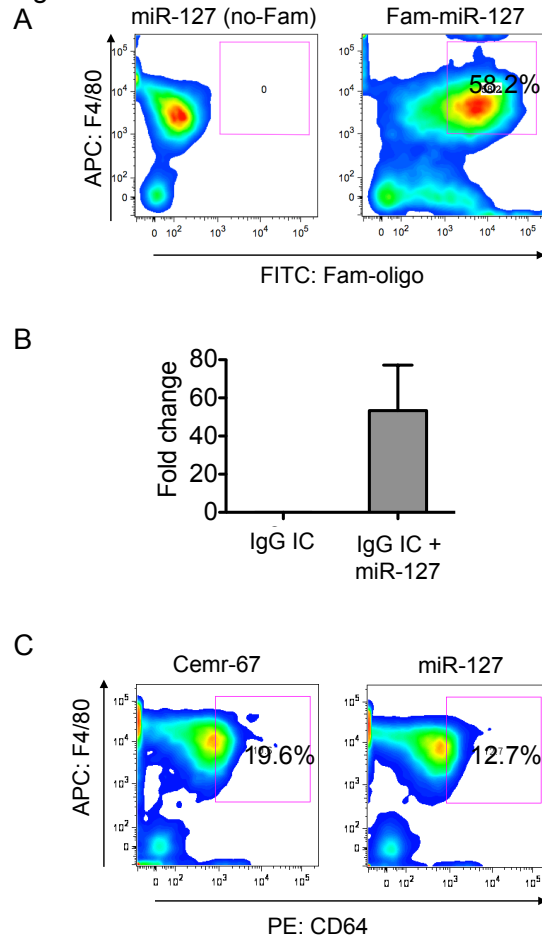
**Figure S2. Establishment of Cre-regulated expression of miR-127 in MH.S cells.** *A.* Lentiviral construct expressing miR-127 was constructed based on pSICO (1). *B.* MH.S cells infected with the indicated lentiviruses were sorted for GFP positivity and super-infected with Ad or Ad-Cre. Four days after infection, genomic DNA was extracted, and PCR was performed to amplify the recombined and unrecombined viral DNA. *C.* The cells were analyzed by epifluorescence microscopy to detect GFP. Similar cell density and identical exposure time was used for all images. *D.* Total RNA extracted from the above MH.S-miR127 and control cells was analyzed for miR-127 levels. RT-PCR shows miR-127 over-expression in MH.S-miR127 cells versus control cells. Values are presented as mean  $\pm$  SEM.  $n = 3-6$ ,  $*p < 0.05$ . The experiments were repeated 3 times.

Fig. S3



**Figure S3. MiR-127 over-expression induced changes in Fc $\gamma$ RI and Fc $\gamma$ RII transcript expression.** Total RNA was isolated from MH.S-miR127 and control cells. cDNA microarray analysis was performed and the Fc $\gamma$ RI and II transcript expressions are shown in the heatmap. Blue represents lower expression and red represents higher expression.

Fig. S4



**Figure S4. Intranasal administration of miR-127 into mouse lung.** *A.* Mice were intranasally administered with synthetic 2'-OME- and cholesterol-modified, Fam-labeled, miR-127 or miR-127 without Fam-labeling. BAL cells were isolated 2 hours later and stained with F4/80-APC antibody. Flow cytometry was performed to determine the percentage of macrophages that ingested Fam-labeled miR-127 oligonucleotides. *B.* Mice received either PBS (20  $\mu$ l/mouse) or miR-127 probes (100  $\mu$ g/20  $\mu$ l/mouse) intranasally 2 h before onset of the IgG IC model (10  $\mu$ g/mouse anti-BSA in 40  $\mu$ l PBS intranasal instillation and 5 mg/kg BSA in 200  $\mu$ l PBS intravascular injection). At 4h after IgG IC onset, mice were sacrificed, and total RNA from lung tissues was isolated. RT-PCR was

performed to determine miR-127 levels in lung tissue. *C.* Mice were intranasally administered with synthetic 2'-OME- and cholesterol-modified miR-127 or control Ccmr-67. BAL cells were isolated 2 hours later and stained with F4/80-APC and CD64-PE antibodies. Flow cytometry was performed to determine CD64 expression on BAL macrophages between miR-127 and control oligonucleotides treated.