

Supporting Information

Table S1 Sequences of DNA and RNA in our study

DNA or RNA	Sequences (from 5' to 3')
CpG1826	TCCATGAC <u>G</u> TTC CTGAC <u>G</u> TTC-NH ₂
Sense siSTAT3	GGACGACUUUGAUUUCAAC(dTdT)
Antisense siSTAT3	GUUGAAAUCAAAGUCGUCC(dTdT)
Sense siSTAT3 linker	GAAC <u>CG</u> UCAUGGA GGACGACUUUGAUUUCAAC(dTdT)
Antisense siSTAT3 linker	GAAC <u>CG</u> UCAUGGA GUUGAAAUCAAAGUCGUCC(dTdT)
Sense scramble linker	GAAC <u>CG</u> UCAUGGA CCUACGCCACCAUUUCGU(dTdT)
Antisense scramble linker	GAAC <u>CG</u> UCAUGGA ACGAAAUGGUGGGCGUAGG(dTdT)



Fig. S1 Photographs of the harvested tumors at the 8th day of the experiment.

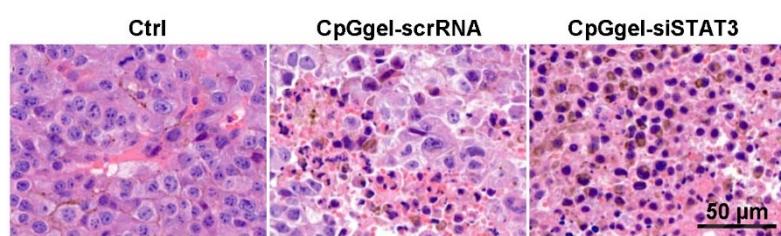


Fig. S2 H&E staining of the tumor sections for different groups.

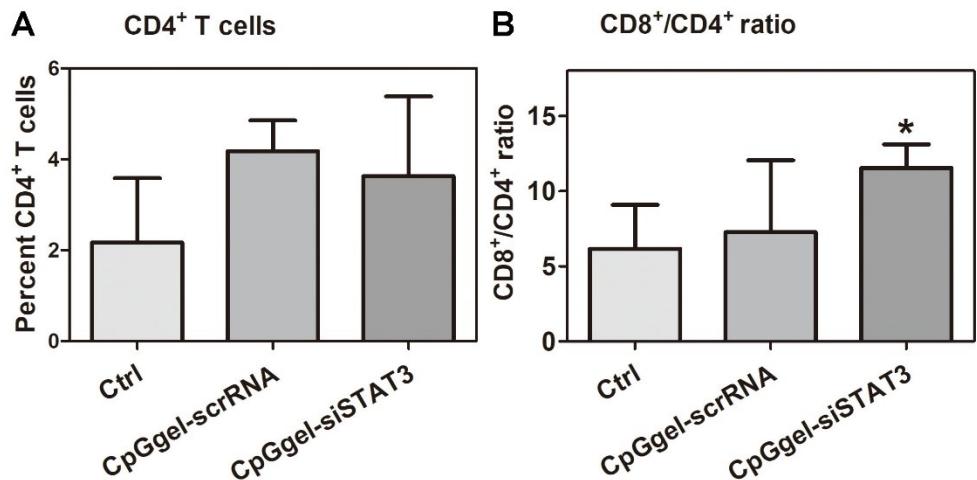


Fig. S3 (A) Percentage of intratumor CD4⁺ T cells for different groups. (B) Intratumor CD8⁺/CD4⁺ ratios for different groups. Data are analyzed by one-way analysis of variance and presented as mean \pm SD. *P < 0.05 vs. the ctrl group.

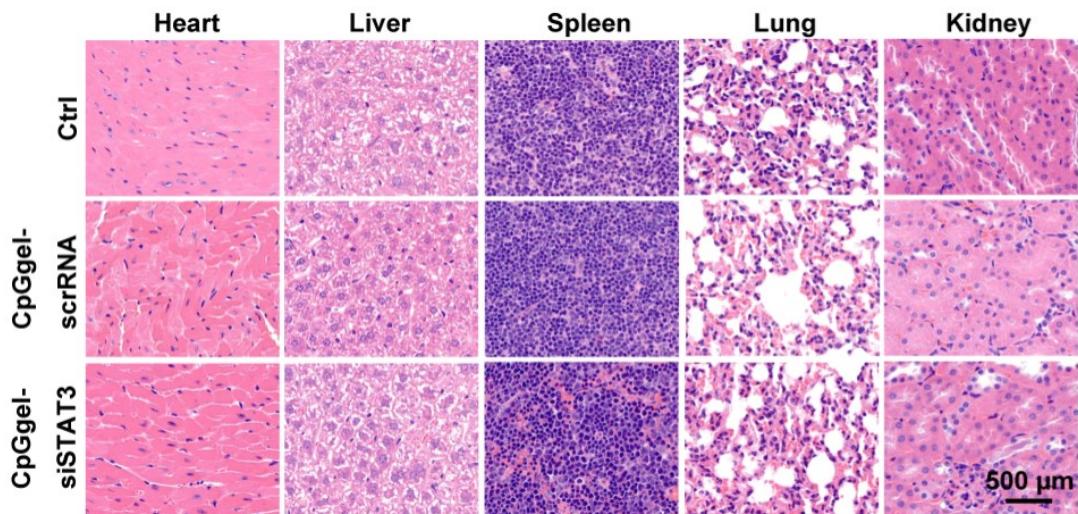
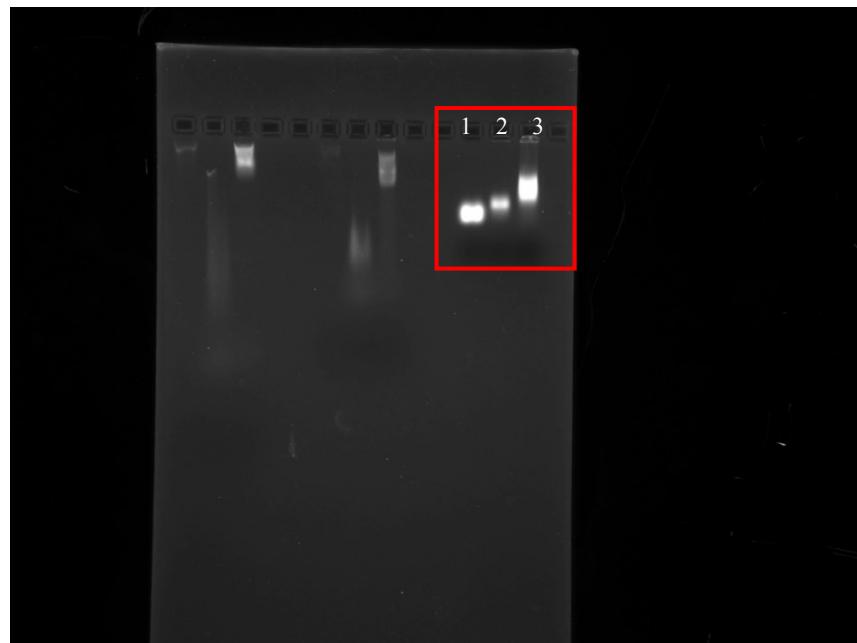
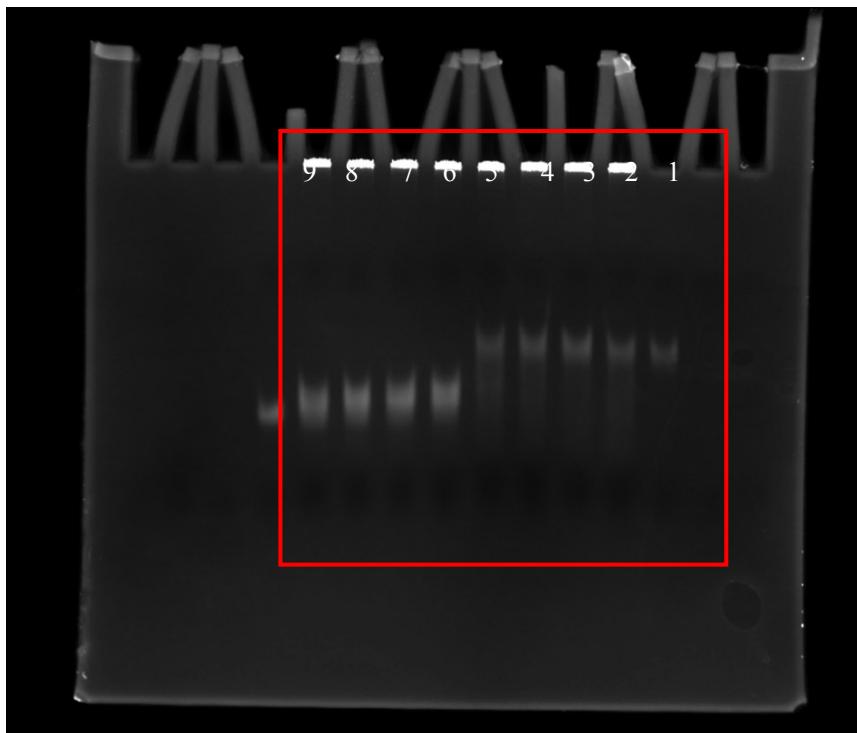


Fig. S4 H&E staining for histological structure of main organs in different groups.

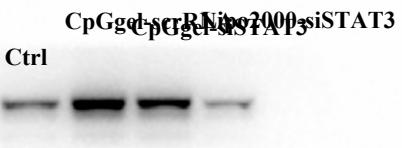
Raw images for electrophoresis data (Data 1 to Data 4)



Data 1 Raw image for Fig. 1B. The formation of CpGgel-siSTAT3 nanogel assayed by 0.5% agarose gel electrophoresis under native condition. lane 1-3: siSTAT3-L, PCL-g-CpG, and CpGgel-siSTAT3 nanogel.



Data 2 Raw image for Fig. 1E. Denaturing PAGE analysis for CpGgel-siSTAT3 nanogel after incubation with RNase H in different concentrations: lane 1: siSTAT3-L; lane 2-9: CpGgel-siSTAT3 nanogel incubated with 0, 0.1, 0.5, 1, 5, 10, 20, 50 U/mL RNase H.



Data 3 Raw image for Fig. 3B. STAT3 protein determined by western blot.



Data 4 Raw image for Fig. 3B. β-actin protein determined by western blot.