

Supplementary Material

Dual-targeting Nanoparticle-mediated Gene Therapy Strategy for Hepatocellular Carcinoma by Delivering Small Interfering RNA

Qi Chang Zheng^{1†}, Shuai Jiang^{1†}, Yu Zhe Wu¹, Dan Shang², Yong Zhang¹, Shao Bo Hu¹, Xiang Cheng¹, Chen Zhang¹, Ping Sun¹, Yang Gao¹, Zi Fang Song^{1*}, Min Li^{1*}

¹Department of Hepatobiliary Surgery, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

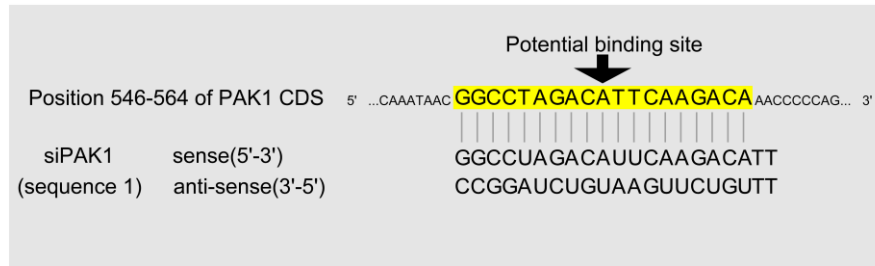
²Department of Vascular Surgery, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

*** Correspondence:**

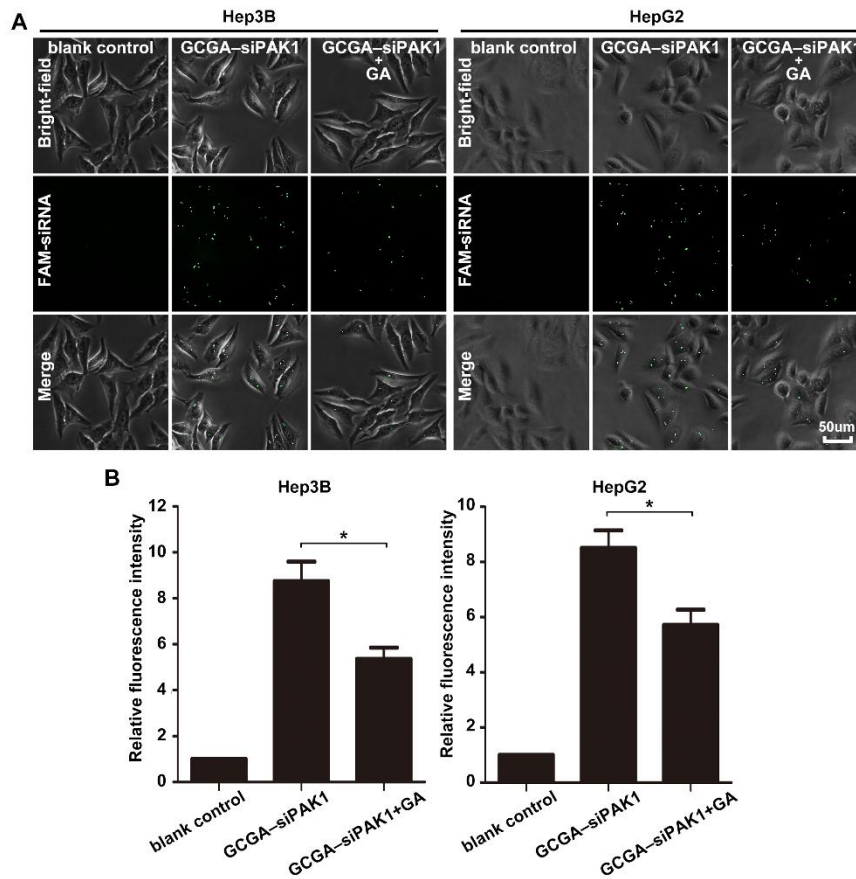
Min Li, liminmed@hust.edu.cn; Zi Fang Song, zsong@hust.edu.cn

† These authors contributed equally to this work.

Figures

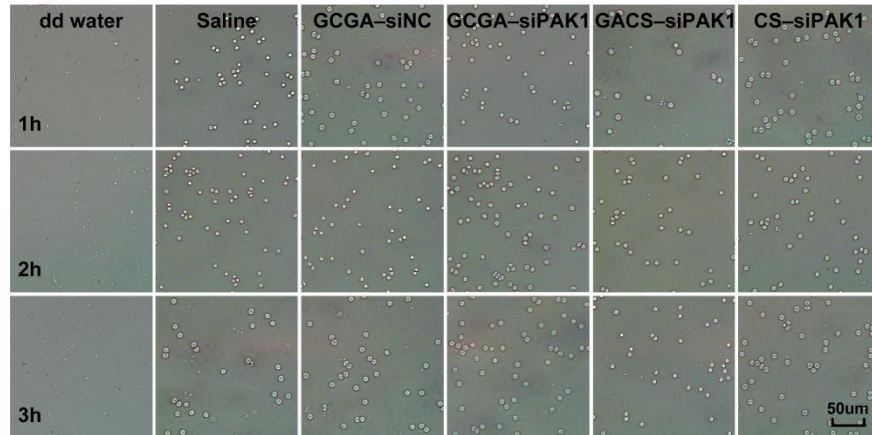


Supplementary Figure S1. Potential siPAK1 binding site in PAK1 sequence.

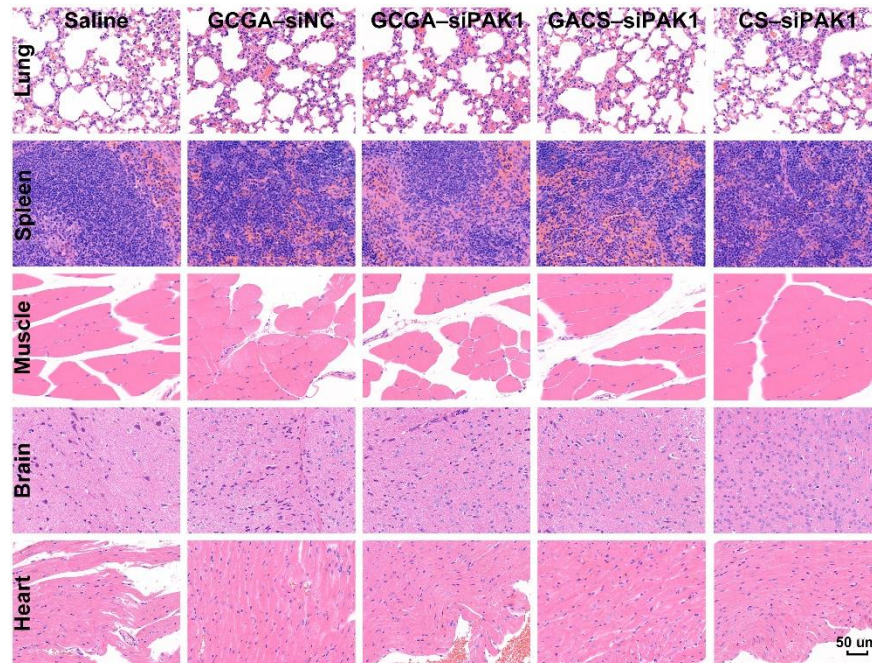


Supplementary Figure S2. (A) Fluorescence images of GCGA-siPAK1 in HCC cells pretreated with free GA (100 ug/mL)

for 30 min. (B) Statistical analysis of fluorescence intensity according to (A).

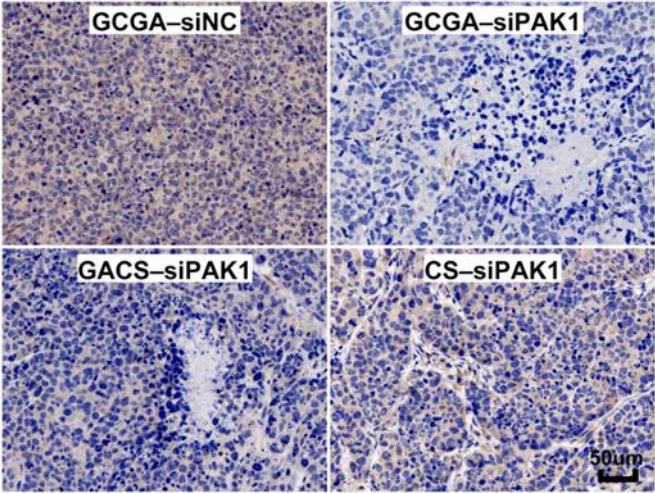


Supplementary Figure S3. Hemolysis assay of RBCs. RBCs were incubated with different NP formulations for 1, 2 and 3 h, respectively. Optical microscopic observations of erythrocytes after incubation with distilled water, saline, and NPs.



Supplementary Figure S4. Histopathologic images (400x) with H&E staining. Various organ sliced from mice on the

eighth day following different treatments.



Supplementary Figure S5. The immunohistochemical staining of PAK1 in tumor sections.