Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.
This journal is © The Royal Society of Chemistry 2021

Supporting Information:

Hierarchical porous calcium-silicon nanospheres enabled co-delivery of microRNA-210 and simvastatin for bone regeneration

Junjie Liu[1,2,a], Yihang Cui[1,2,a], Yudi Kuang[2,3,4], Shan Xu[1,2], Qiji Lu[1,2], Jingjing Diao[2,4,5*], Naru Zhao[1,2,4*]

1. School of Materials Science and Engineering, South China University of Technology, Guangzhou 510641, P. R. China
2. National Engineering Research Center for Tissue Restoration and Reconstruction, South China University of Technology, Guangzhou 510006, P. R. China
3. School of Biomedical Science and Engineering, South China University of Technology, Guangzhou 510006, P. R. China
4. Innovation Center for Tissue Restoration and Reconstruction, South China University of Technology, Guangzhou 510006, P. R. China
5. Medical Devices Research & Testing Center of SCUT, Guangzhou 510006, P. R. China

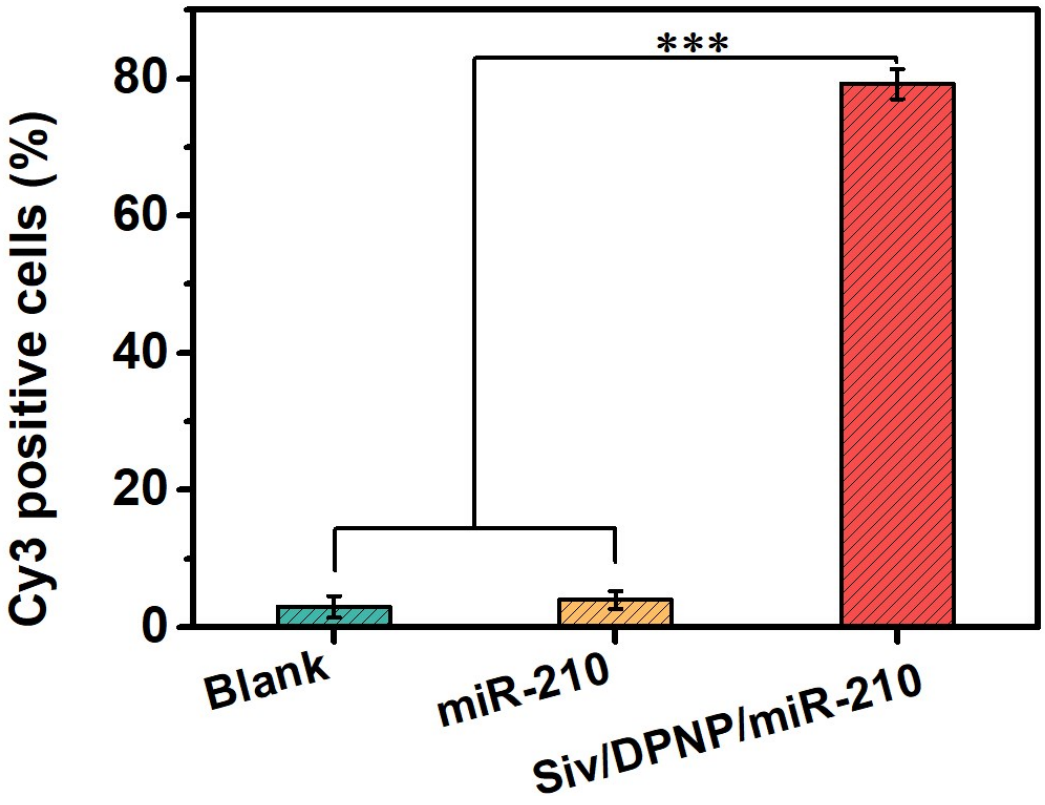

Figure S1. Statistic analysis of Cy3 positive cells by flow cytometry.

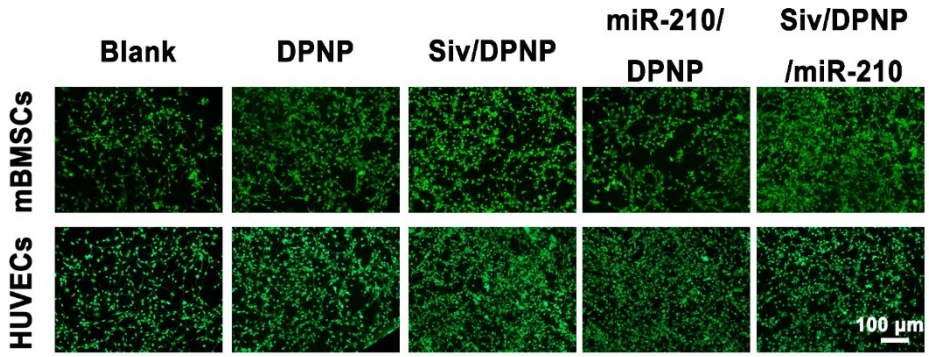

Figure S2. Fluorescence images demonstrating the cell viability of mBMSCs and HUVECs after 5 days culture. Viable cells were stained green with calcein acetoxymethyl ester (Calcin-AM), and dead cells were stained red with propidium iodide (PI).

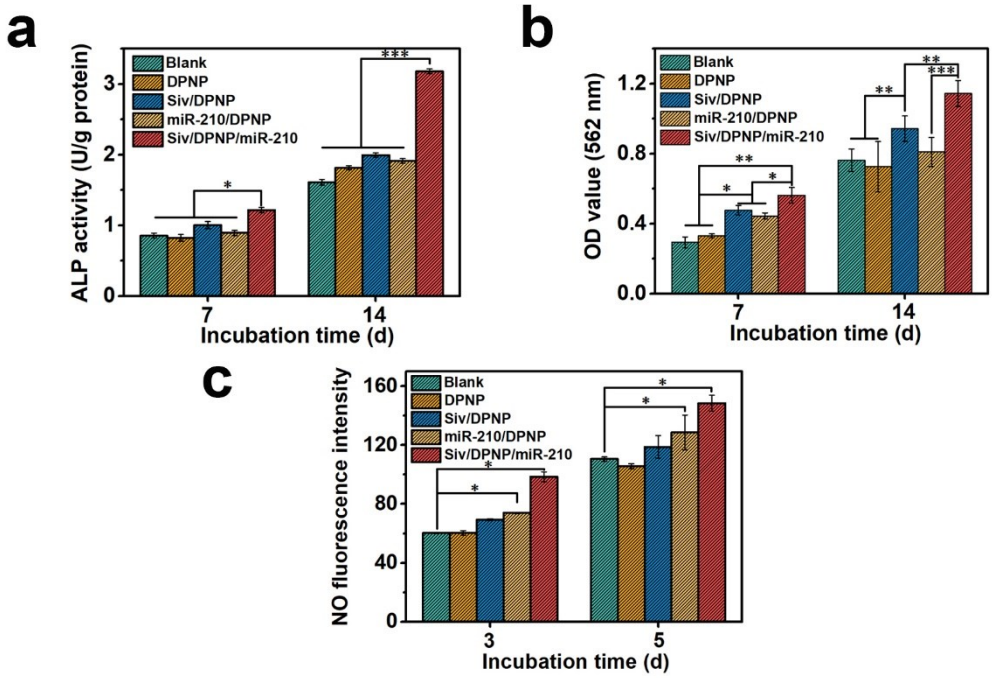

Figure S3. (a) ALP activity and (b) Relative mineralized area in mBMSCs transfected by Siv/DPNP/miR-210 after 7 and 14 days. (c) The quantity of NO expression in HUVECs cultured with free DPNP, Siv/DPNP, miR-210/DPNP, and Siv/DPNP/miR-210 after 3 and 5 days.

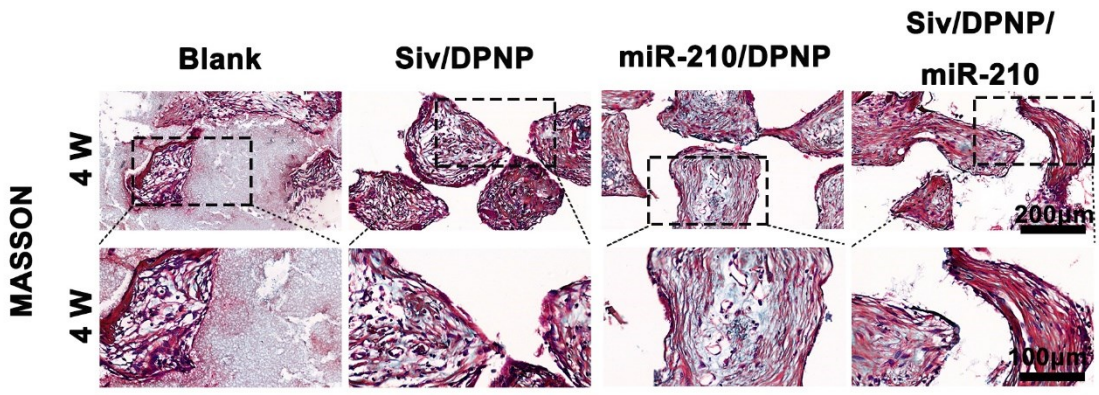

Figure S4. MASSON staining images of the calvarial samples after 4 weeks