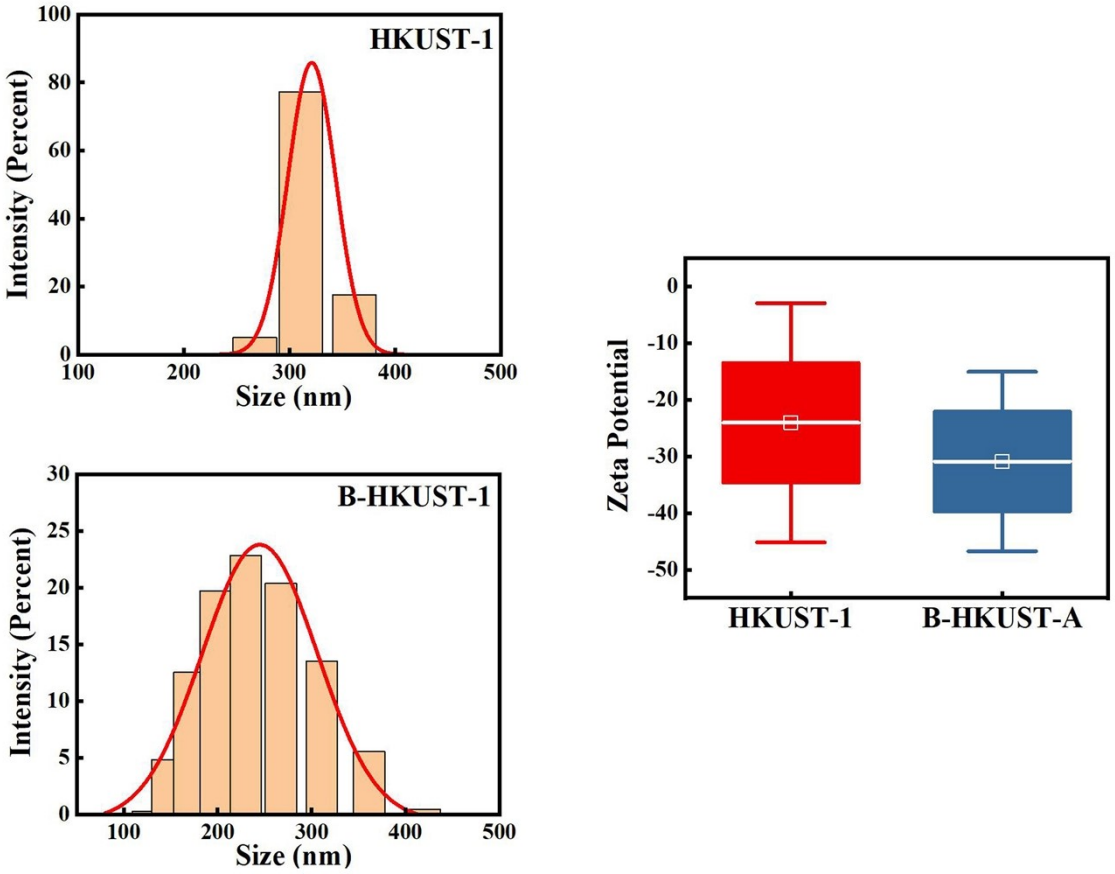
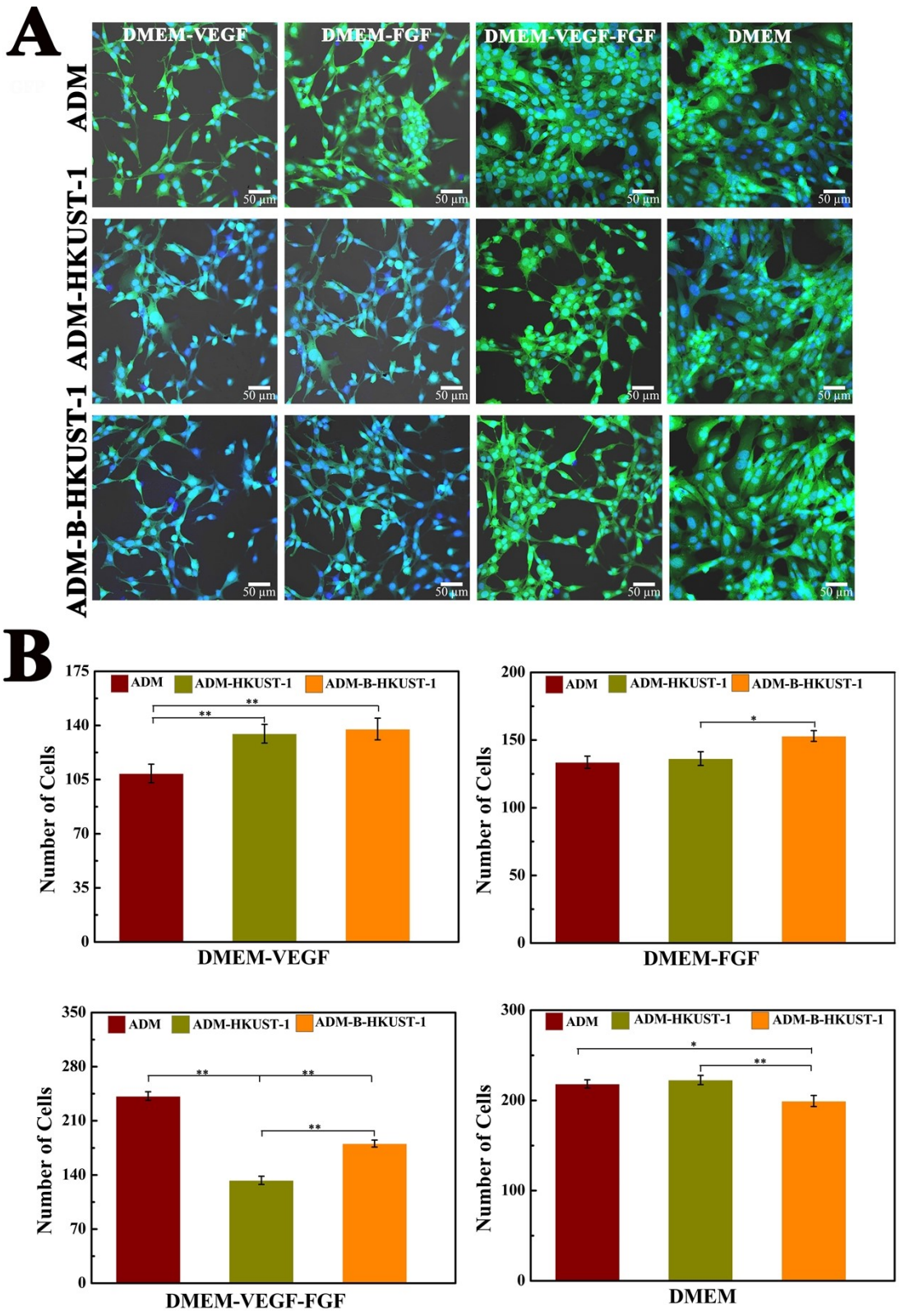
Electronic Supplementary Material (ESI) for Biomaterials Science.



FigureS1 The size distribution and Zeta potential of HKUST-1 and B-HKUST-1 in distilled water.



FigureS2 MSCs differentiated into vascular endothelial cells 7 days later. Representative images of GFP (green) and DAPI (blue) staining in the (A) ADM, ADM-HKUST-1 and

ADM-B-HKUST-1 groups. (B) Quantitative analysis of the number of cells in each medium at 7 days.Original magnification: 20x, scale bar: 50 μm.

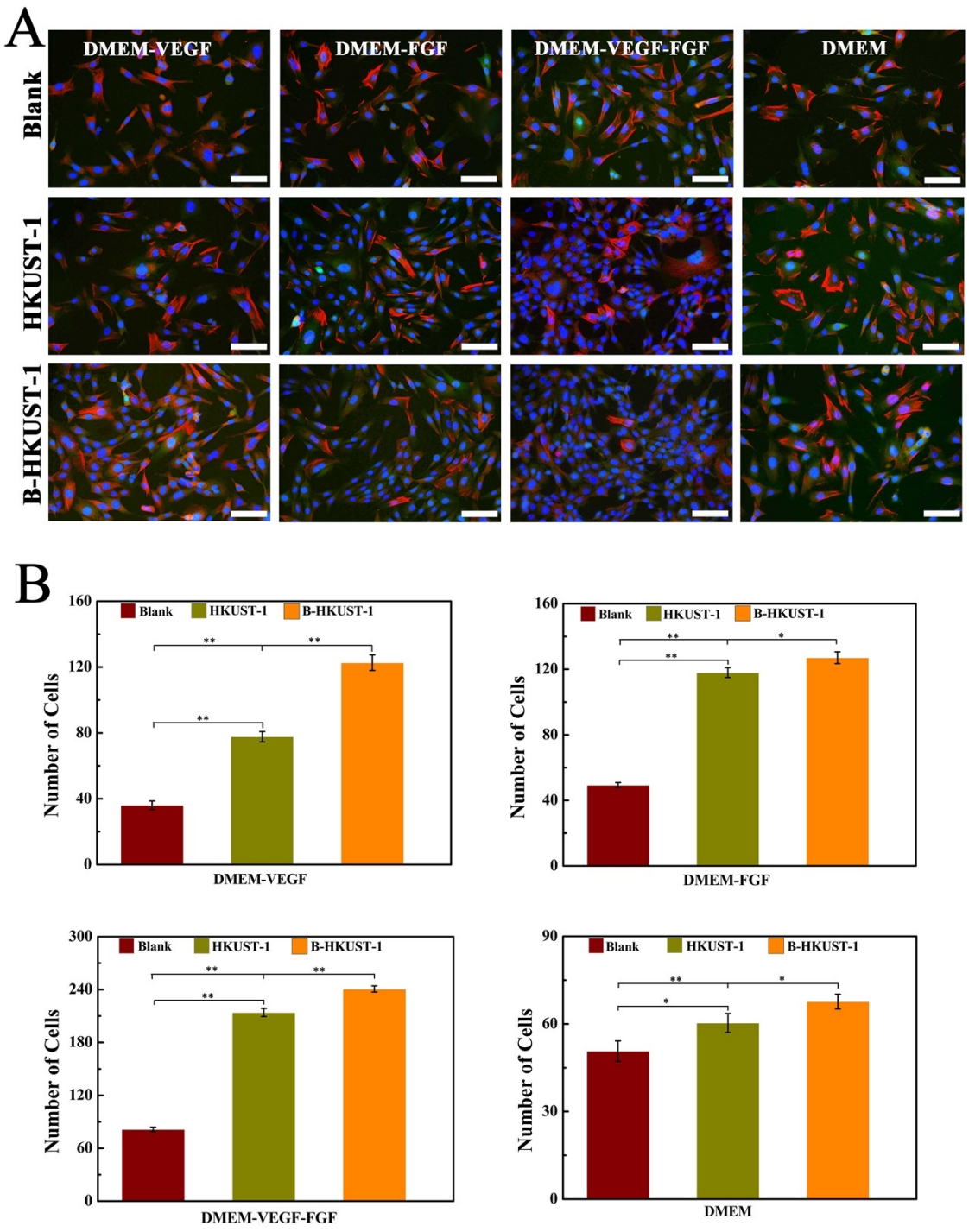


Figure S3 Single-labeled immunofluorescence analysis of α-SMA after 10 days (A) of differentiation. Quantitative analysis of cell number at 10 days (B). Original

magnification: 200×, scale bars: 100 μm. *p < 0.05, **p < 0.01.

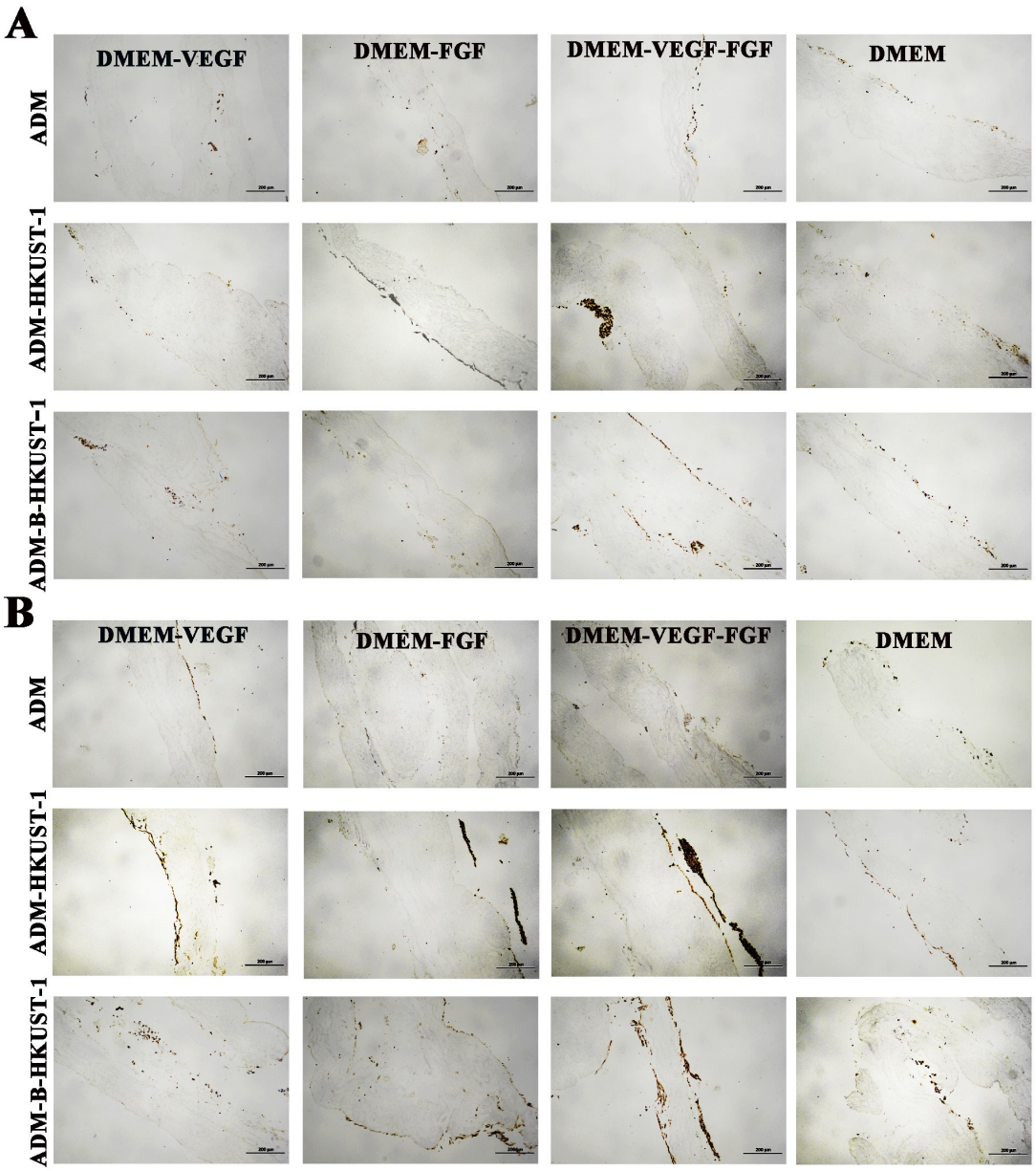


Figure S4 Differentiation analysis of composite scaffolds. Single-labeled Immunohistochemistry analysis of α-SMA after 10 days(A) and 20 days (B) of differentiation (Brown: positive area expression, blue: negative area expression).

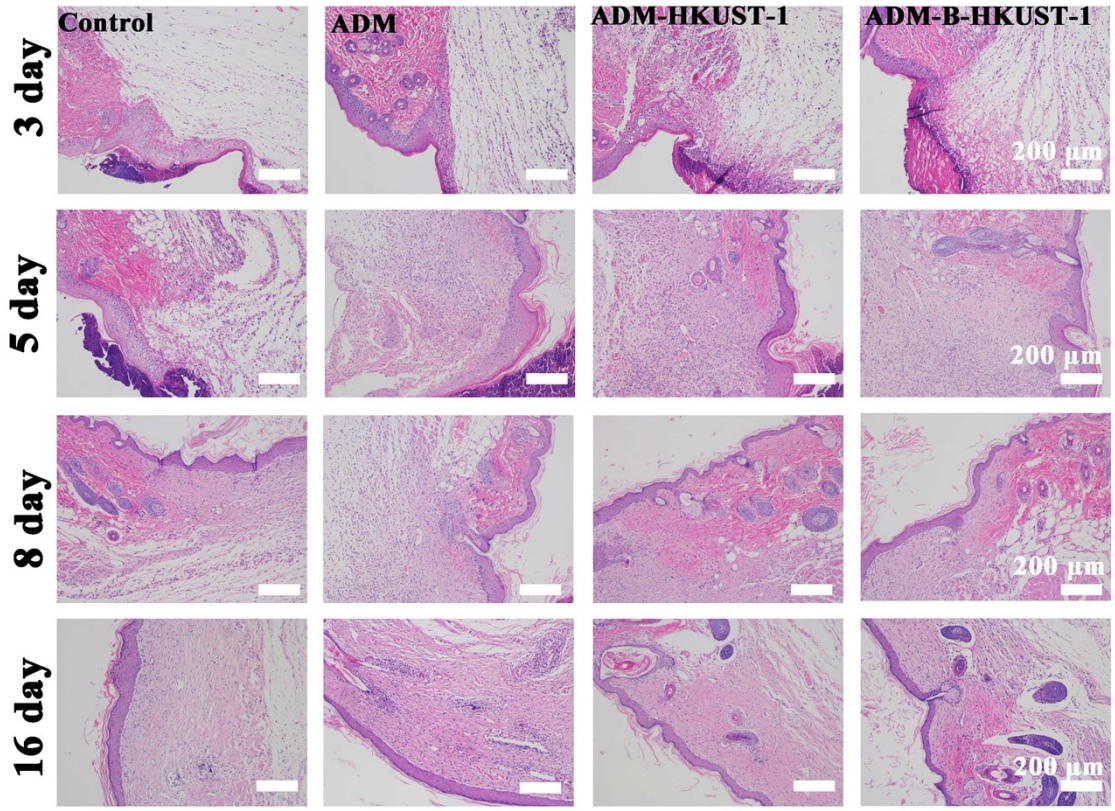


Figure S5 Micrographs of H&E stained wound beds at 3, 5, 8 and 16 days postwounding from different groups and trichrome-stained of the healing wounds in the control, ADM, ADM-HKUST-1, ADM-B-HKUST-1.

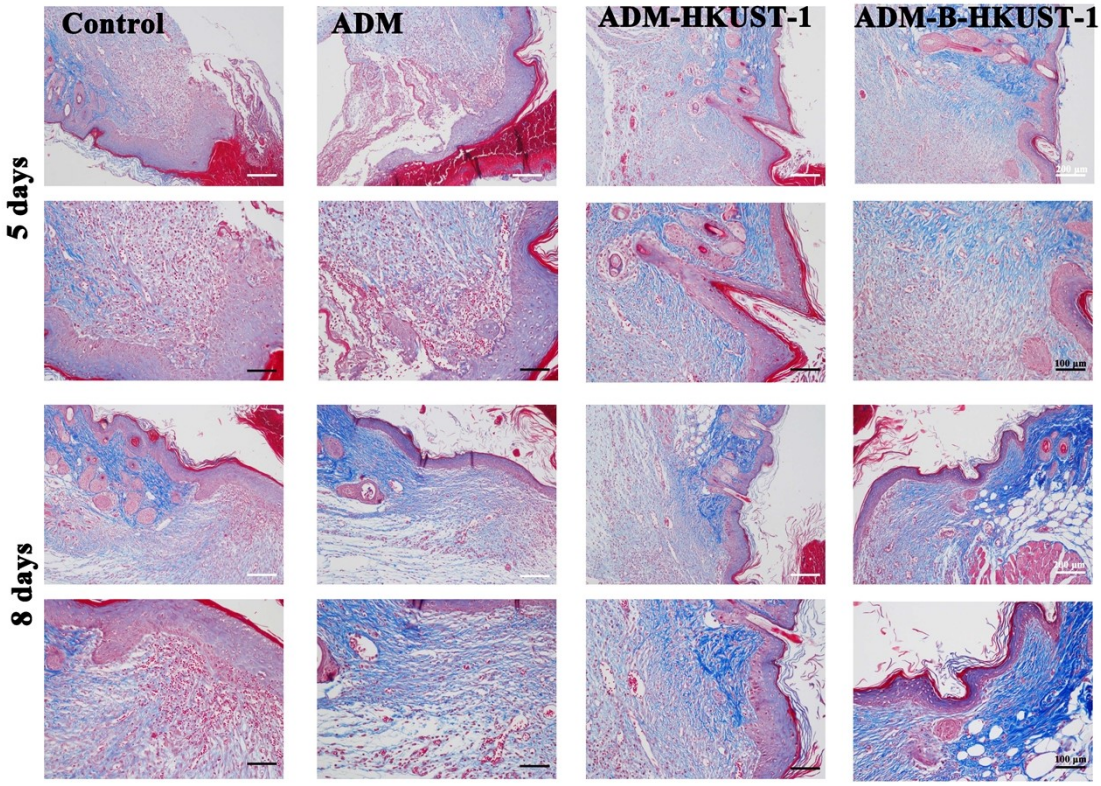
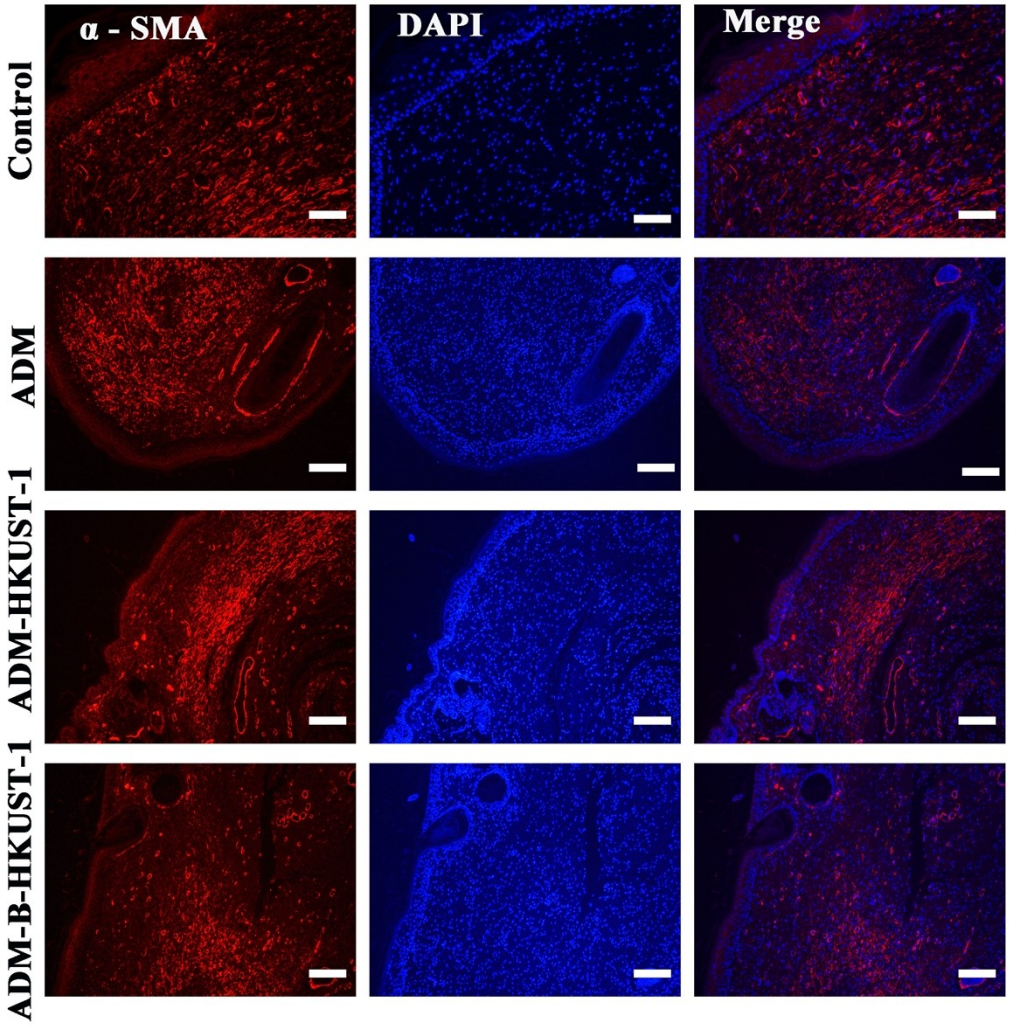


Figure S6 Micrographs of trichrome-stained of the healing wounds in the control, ADM, ADM-HKUST-1 and ADM-B-HKUST-1 at 5 days and 8 days.


α - SMA
DAPI
Merge
Control
ADM
ADM-HKUST-1
ADM-B-HKUST-1

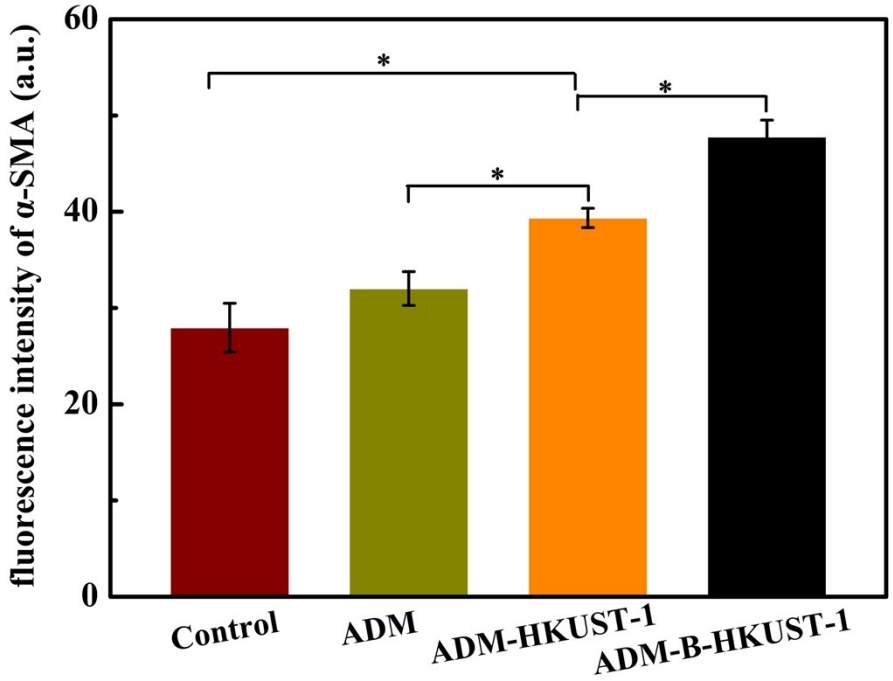

fluorescence intensity of α-SMA (a.u.)
60
40
20
0
*
*
*
Control
ADM
ADM-HKUST-1
ADM-B-HKUST-1

Figure S7 Single-labeled immunofluorescence analysis of α-SMA in the wound bed.