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Tracking mesenchymal stem cell tumor-homing using fluorescent silica nanoparticles

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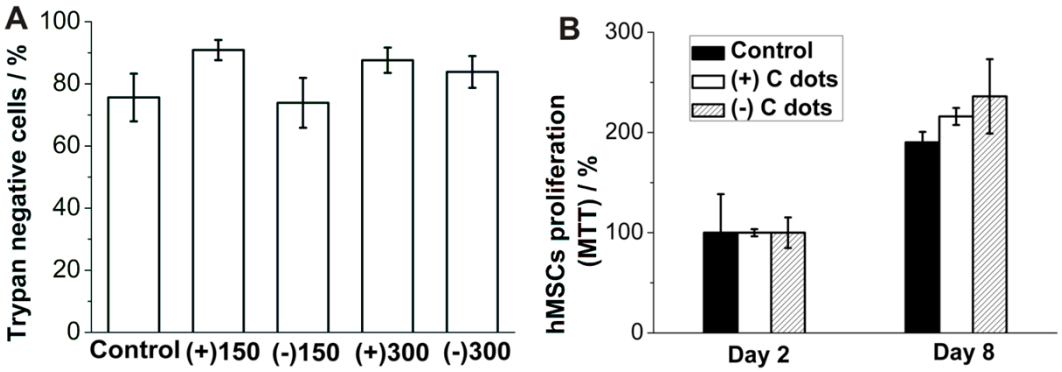
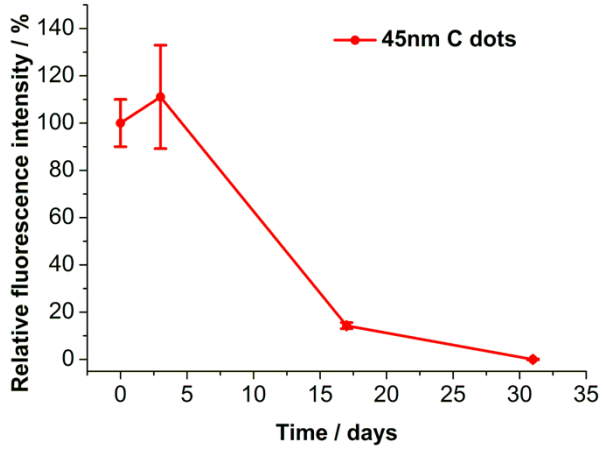
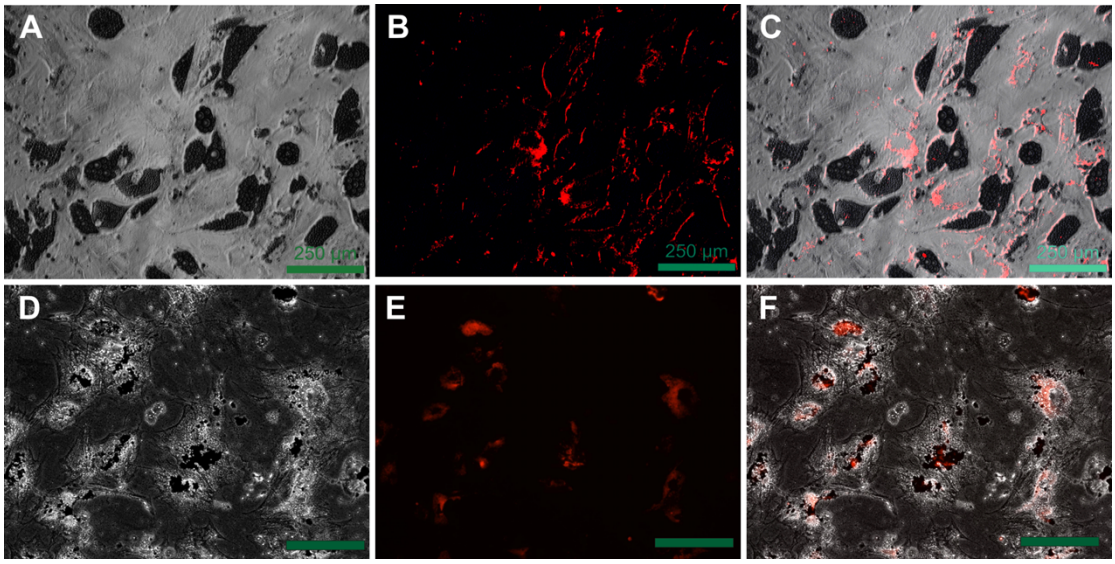


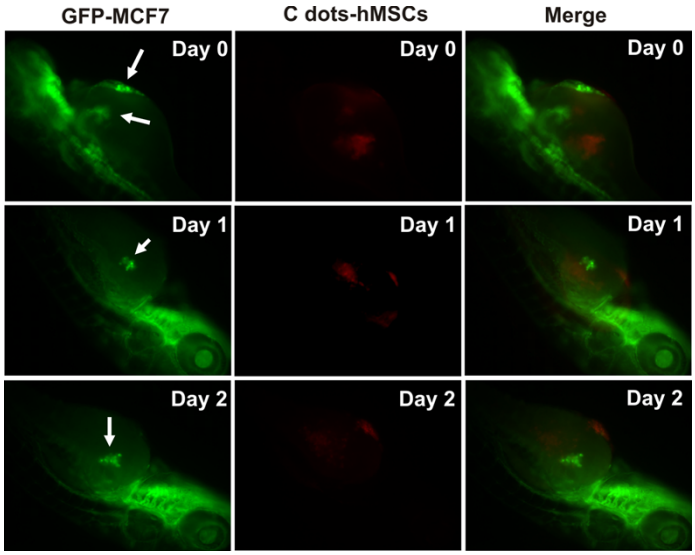
SI Figure 1. (**A**) Viability of hMSCs when incubated with 0 (control), 150 μg/mL, 300 μg/mL of C-dots with both positive (+) and negative (-) charges for 24 hours. (**B**) Proliferation of hMSCs labeled with 150 μg of (+) and (-) C-dots at day 2 and 8.



SI Figure 2. The change in the fluorescence intensity of 45 nm C dots labeled hMSCs.



SI Figure 3. Images of C dots labeled hMSCs under differentiation: (**A-C**) Bright field, fluorescence, and merged images of hMSCs in the adipogenic differentiation at day 23; (**D-F**) Bright field, fluorescence, and merged images of hMSCs in the osteogenic differentiation at day 17. Scale bars are 250 µm.



SI Figure 4. Fluorescence images of C dots labeled hMSCs in a fli:EGFP transgenic zebrafish. GFP-MCF7 cells and C dots labeled hMSCs were injected one after another at the same location (perivitelline space) of a three-day-old zebrafish larva. Green color represents the GFP-MCF-7 cells (indicated by white arrows) and the fluorescence of the blood vessels. Red color represents C dots labeled hMSCs. Images were taken at day 0, 1, and 2 after injection.