

Supplementary Materials

Small extracellular vesicles from deferoxamine-primed stem cells promote angiogenesis and tissue integration

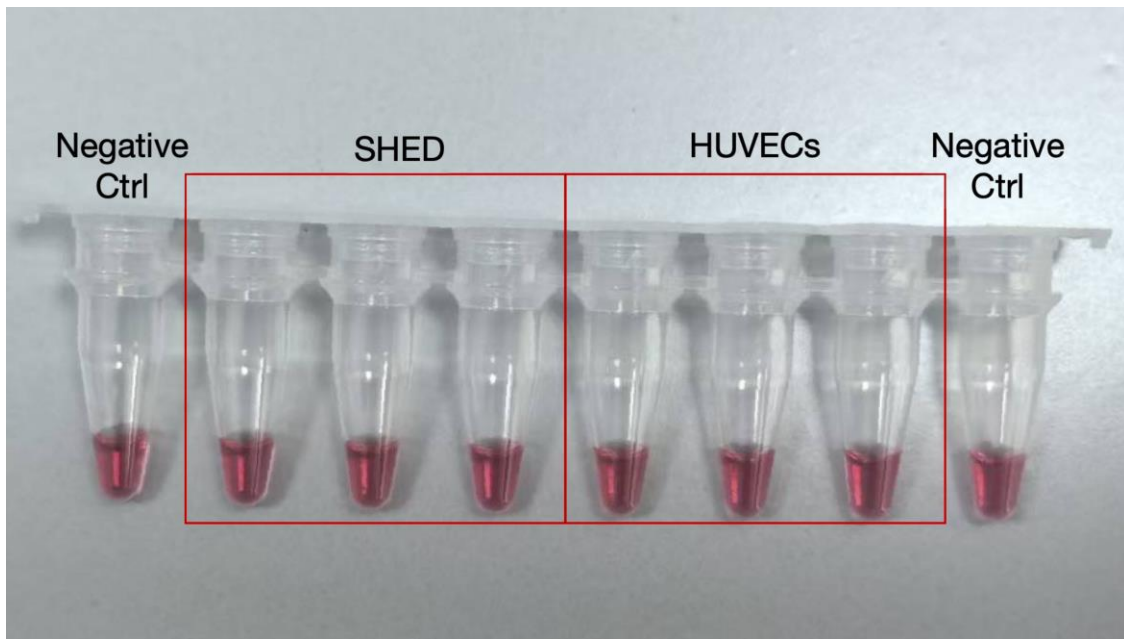
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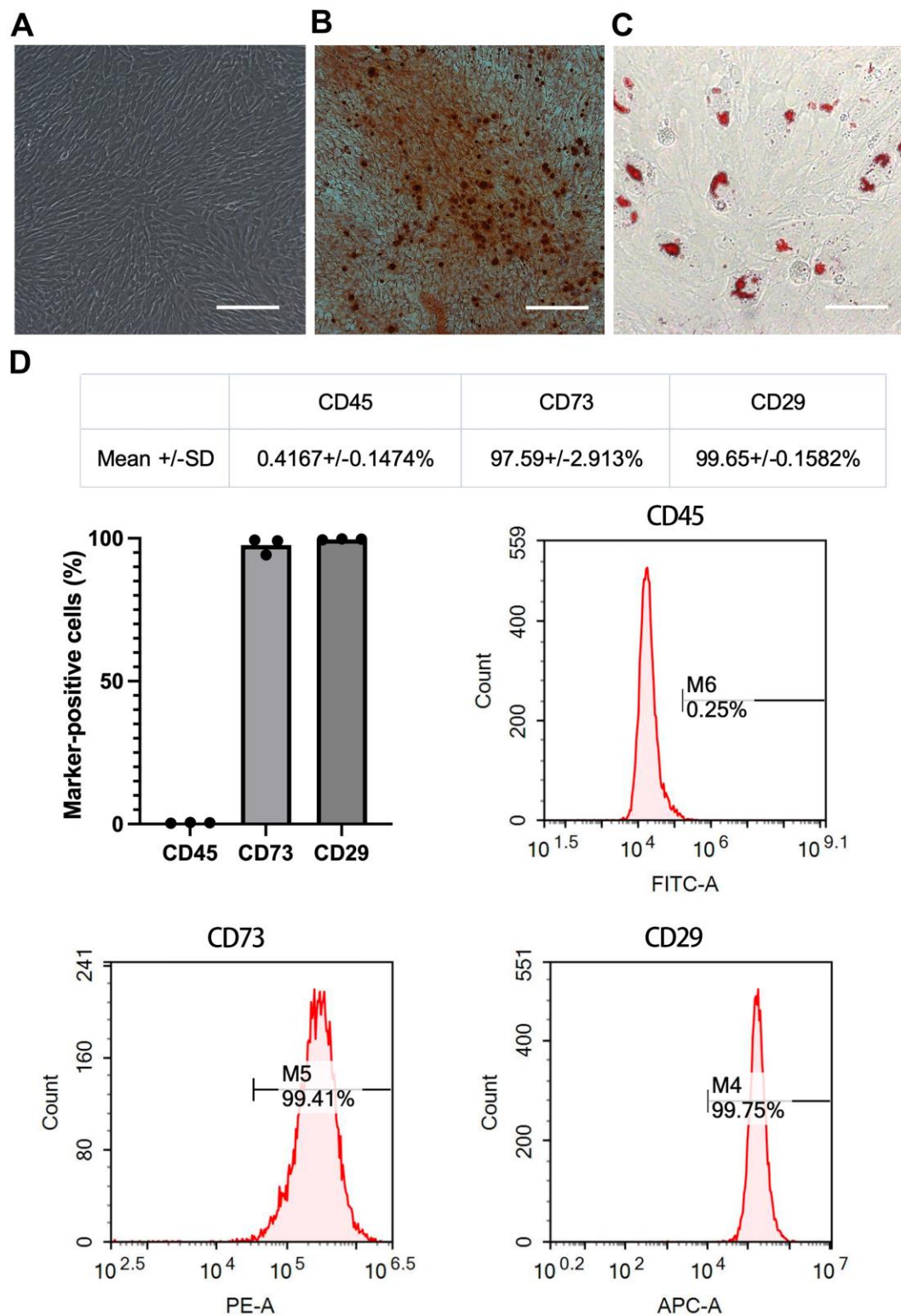
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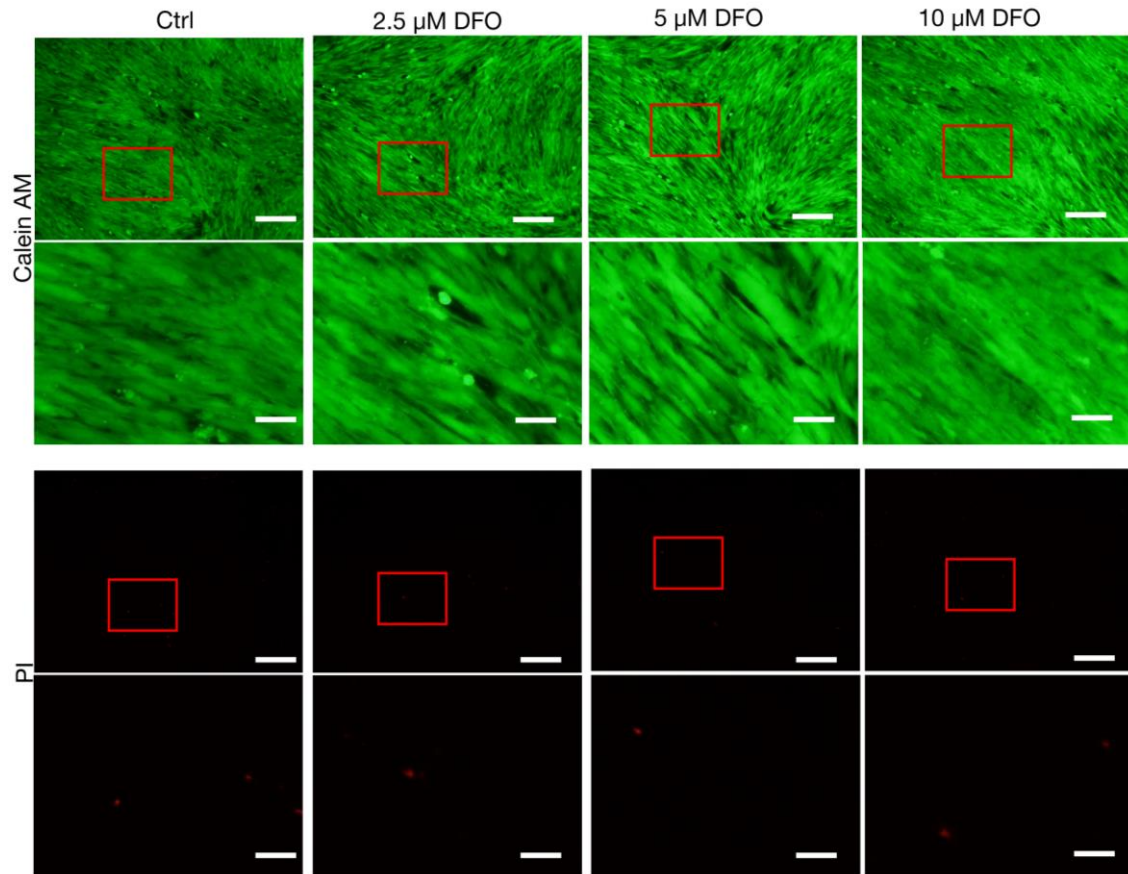
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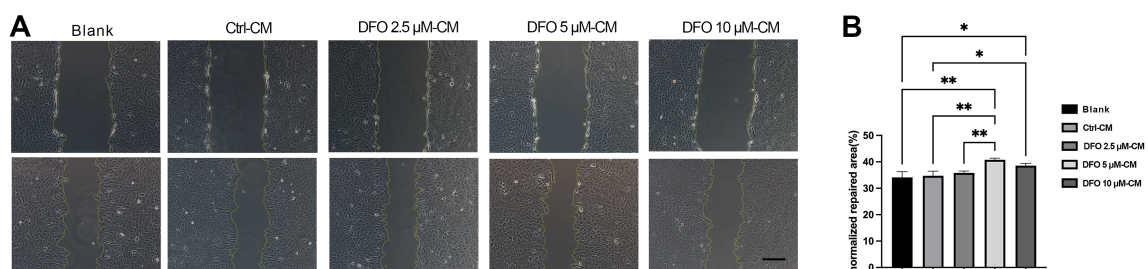
Supplementary Figure 1. Mycoplasma detection for SHED and HUVECs.



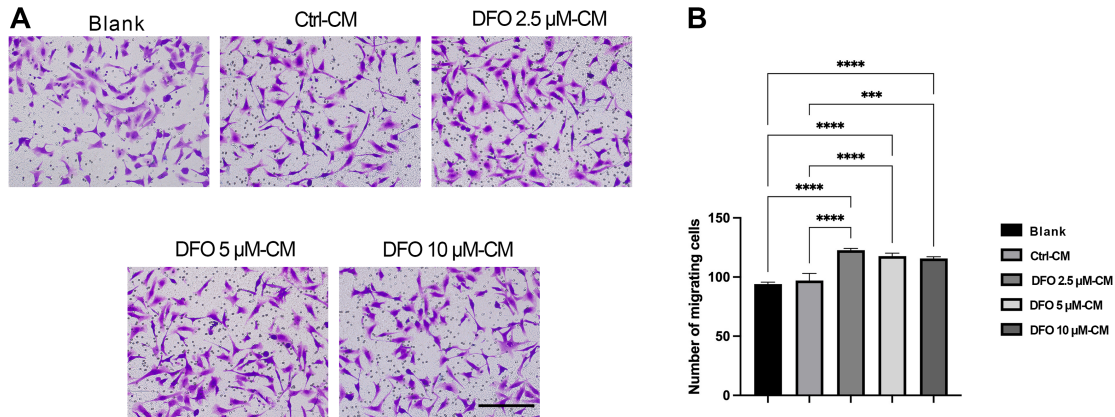
Supplementary Figure 2. Identification and characterization of SHED. Representative images and flow cytometry profiles are shown. (A) Morphological observation of SHED (Scale bar: 200 μ m); (B and C) Osteogenic and adipogenic differentiation of SHED assessed by Alizarin Red S (Scale bar: 200 μ m) and Oil Red O staining, respectively (Scale bar: 50 μ m); (D) Flow cytometric analysis of SHED surface markers CD45, CD73, and CD29. Quantitative data are presented as mean $\pm$ SD ($n = 3$ biological replicates).



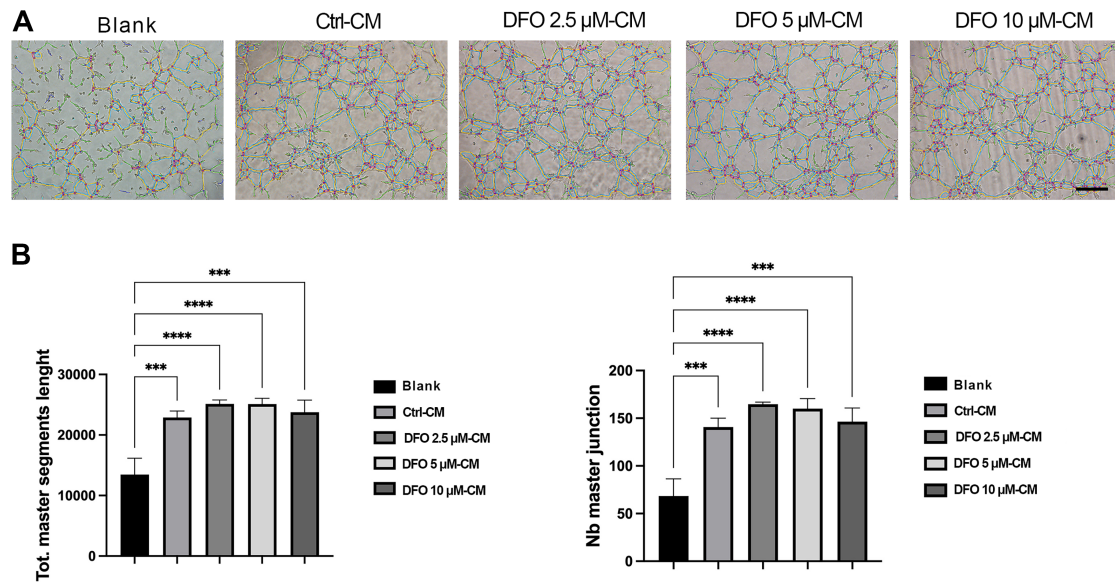
Supplementary Figure 3. Effects of DFO preconditioning on SHED viability. Representative Calcein AM/PI staining images of SHED treated with different concentrations of DFO. Live cells were stained green by Calcein AM, whereas dead cells were stained red by PI. The enlarged images correspond to the red boxed regions in the upper panels ($n = 3$ independent biological replicates, Scale bar: 200 μm for the upper panels and 50 μm for the enlarged panels).



Supplementary Figure 4. Effects of DFO Preconditioning on the Secretome of SHED. (A) HUVECs migration assessed by wound healing assay (Scale bar: 200 μm), (B) with corresponding quantitative analysis. Data are presented as mean $\pm$ SD from at least three independent biological replicates. Statistical analysis was performed using one-way ANOVA followed by Tukey's HSD post-hoc test. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, **** $P < 0.0001$.



Supplementary Figure 5. Effects of DFO Preconditioning on the Secretome of SHED. (A) HUVECs migration assessed by transwell assay (Scale bar: 200 μ m), (B) with corresponding quantitative analysis. Data are presented as mean $\pm$ SD from at least three independent biological replicates. Statistical analysis was performed using one-way ANOVA followed by Tukey's HSD post-hoc test. * P < 0.05, ** P < 0.01, *** P < 0.001, **** P < 0.0001.



Supplementary Figure 6. Effects of DFO Preconditioning on the Secretome of SHED. (A) Matrigel tube formation assay of HUVECs (Scale bar: 200 μ m) and (B) corresponding quantitative analysis of total master segments length and number of master junctions. Data are presented as mean $\pm$ SD from at least three independent biological replicates. Statistical analysis was performed using one-way ANOVA followed by Tukey's HSD post-hoc test. * P < 0.05, ** P < 0.01, *** P < 0.001, **** P < 0.0001.