

Supplementary Figures

Potential mechanism of dermal wound treatment with preparations from the skin gel of Arabian Gulf catfish: A unique furan fatty acid (F6) and cholesta-3,5-diene (S5) recruit neutrophils and fibroblasts to promote wound healing

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Running title: A furan fatty acid and a cholesterol metabolite accelerate wound healing

Keywords: F6 (furan F-acid), S5 (cholesta-3,5-diene), FB (Fraction-B), Gulf catfish lipids, wound healing, histology, collagen, fibronectin, fibroblasts, leukocyte, human, rat, zebrafish

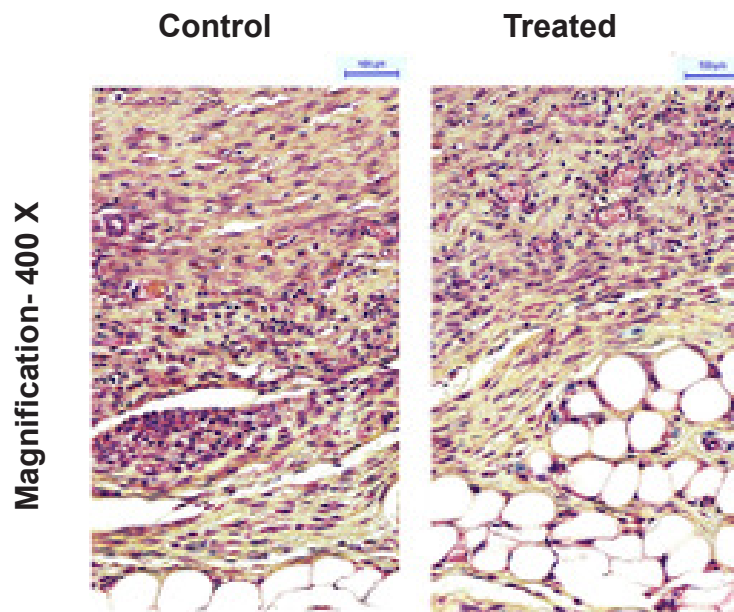


Figure 1S. FB promotes recruitment of increased number of immune cells to the wound site (400 x). Leukocytes (round cells) and fibroblasts (elongated cells with space in between containing yellow collagen).

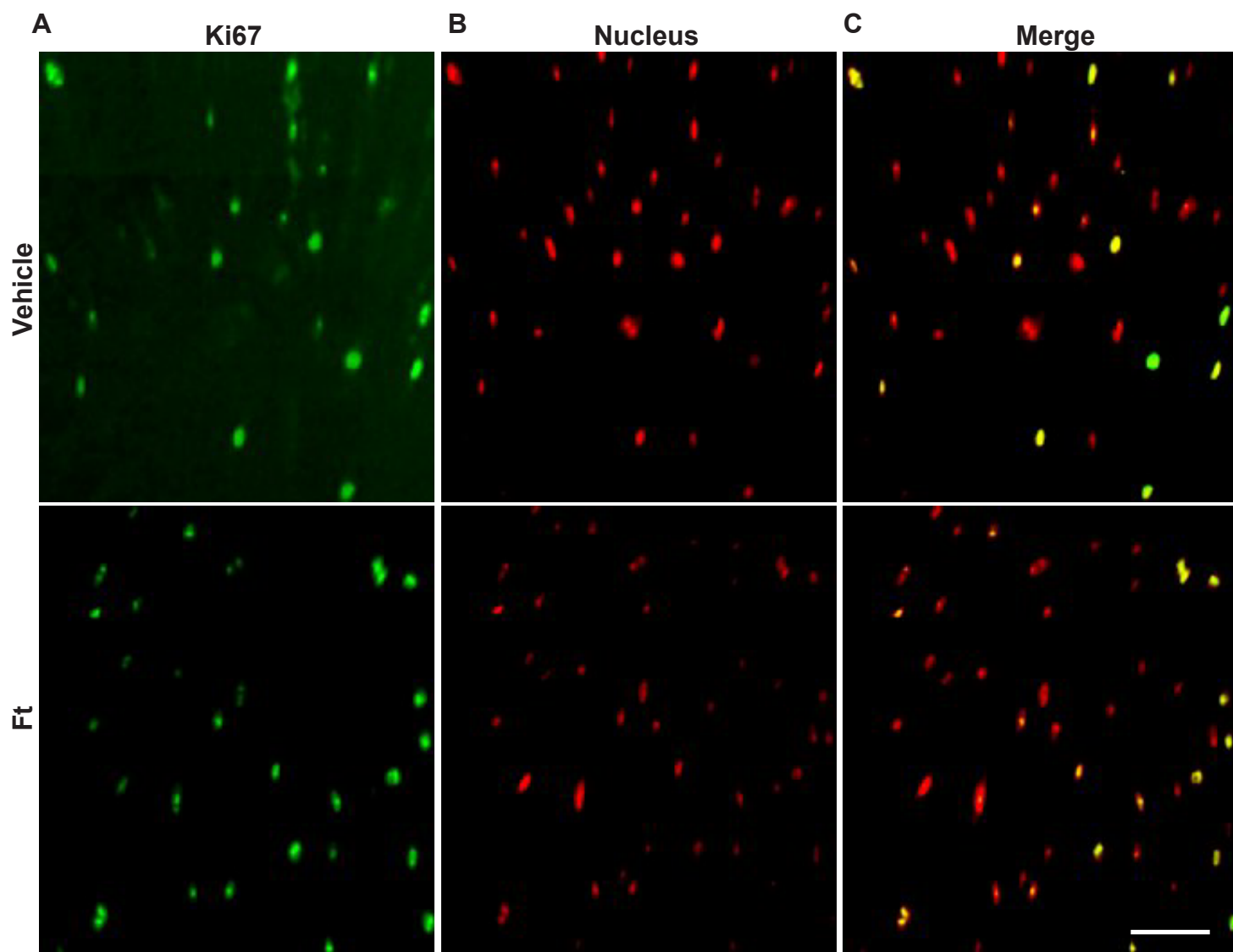


Figure 2S. Ft does not promote fibroblast proliferation. Investigation of the effects of Ft and vehicle on fibroblast proliferation measured with a cell proliferation marker, Ki67, in dermal human fibroblasts after 24 h incubation, ex vivo. **A**, green fluorescent stain, Ki67; **B**, red, propidium iodide nuclear stain; **C**, merged images.

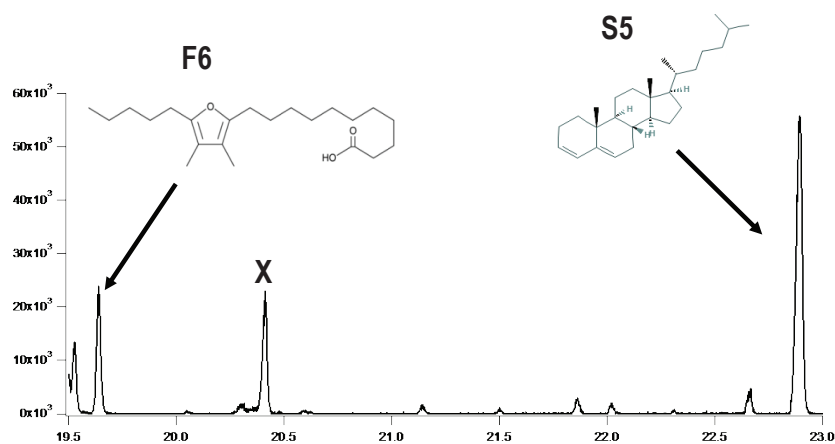


Figure 3S. GC-MS profile showing that F6 and S5 are minor components of Ft. Gas chromatogram of the Ft lipid fraction as the methyl ester derivative showing the presence of furan fatty acid (F6), and the cholesterol metabolite S5, the two compounds reported in this study. Peak X represents a non-lipid impurity.

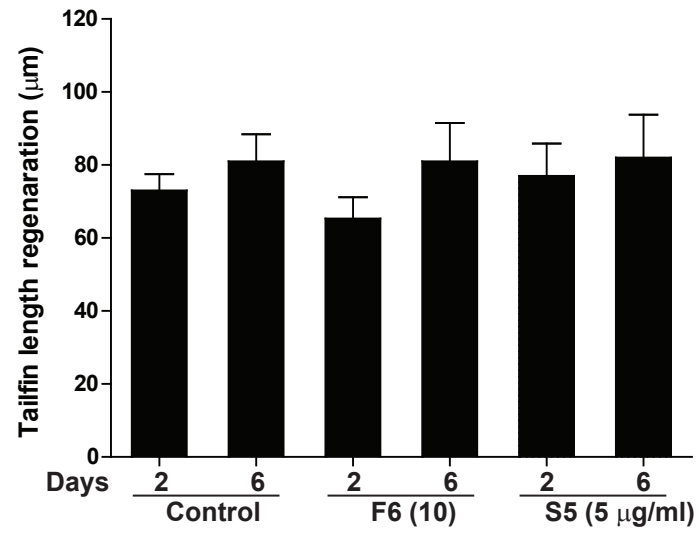


Figure 4S. F6 and S5 do not promote effective regeneration of injured tailfin in transgenic zebrafishes.