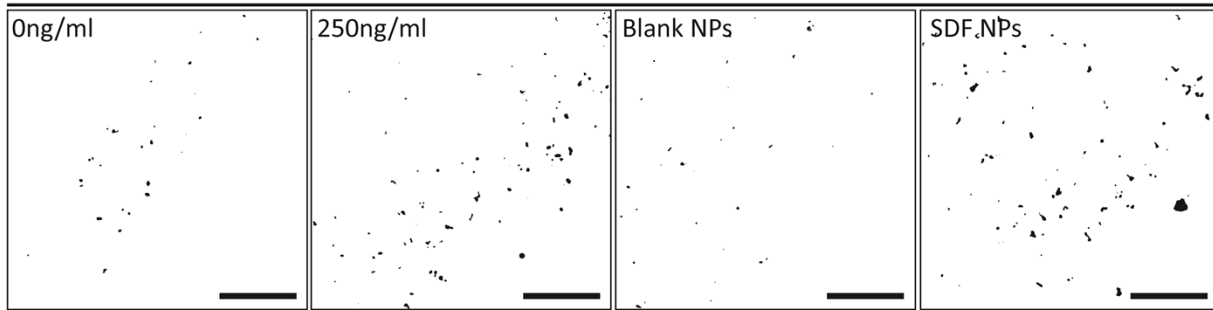


Figure S1: Representative figures for quantification of NPSC migration in response to known concentrations of SDF-1 α . The figures shown are small sections (bottom-right edge) of each membrane depicting the size and shape of nuclear material. Nuclear stains sized between 10-30 μ m were considered individual cells and counted. For each concentration group, the nuclei were stained, whole membranes were imaged and thresholded using ImageJ. The dark regions above represent positive staining. A particle count algorithm was used to quantify nuclei count. Nuclear material is well compartmentalized (smooth elliptical shape of signal) and larger or oblong shapes are postulated to represent cells in close proximity to one another. (Scale bars = 300 μ m)

Day 0-1



Day 20-22

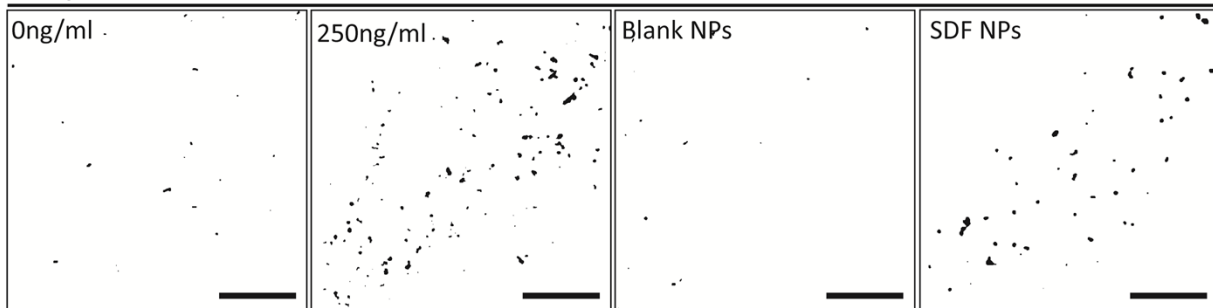


Figure S2: Representative images of membranes from the migration assays that evaluate bioactivity of SDF-1 α in release media from days 0-1 and days 20-22. As before, the provided images represent similar regions of the membrane (bottom-right edge). The same methodology was used to quantify nuclei count. As with the free SDF-1 α migration study, nuclear material is well compartmentalized and signal comprising a large area is postulated to be due to NPSCs in close proximity. (Scale bars = 300 μ m)