

Chemically detachable polyelectrolyte multilayer platform for cell sheet engineering

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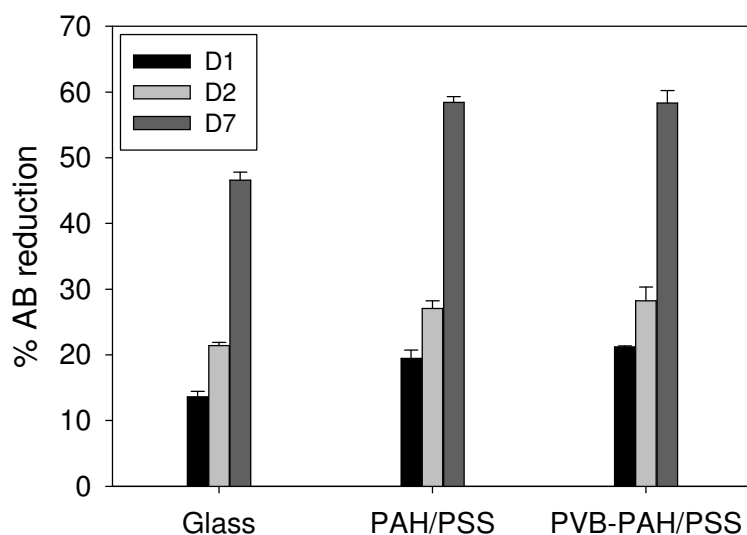


Figure S-1: Viability of HGFs, measured by Alamar Blue™ test, cultured on a glass substrate, on (PAH/PSS)₁₀-PAH film, named PAH/PSS and (PVBANH₃⁺/PVBACOO⁻)₁₀-(PAH/PSS)₁₀-PAH film, named PVB-PAH/PSS.

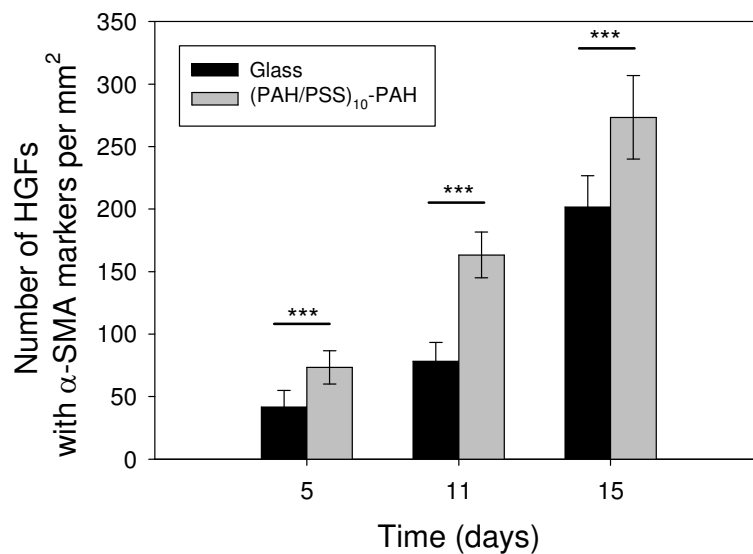


Figure S-2: Number of HGFs, presenting α -SMA markers, seeded on a glass substrate and on a $(\text{PAH/PSS})_{10}$ -PAH film after 5, 11 and 15 days of culture. The numbers represent the mean and standard deviation on at least 10 images of three experiments (***) $P < 0.001$ by Mann-Whitney test).

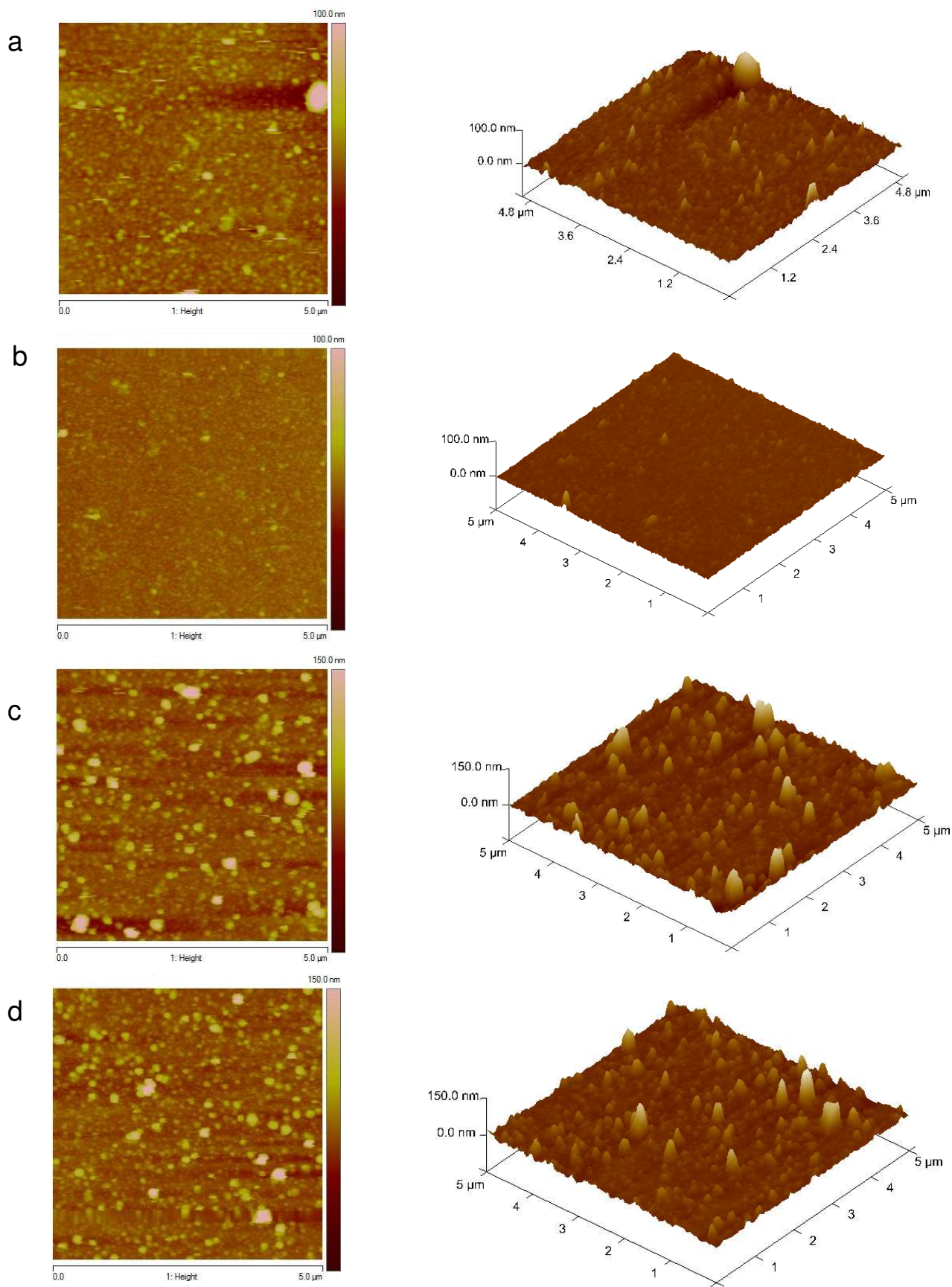


Figure S-3: Typical AFM images, obtained in contact mode in dry state, of PEI-(PVBACOO⁻/PVBANH₃⁺)₇ film (a) before and (b) after TCEP treatment (5 mM, 30 min) and of PEI-(PVBACOO⁻/PVBANH₃⁺)₁₀-(PSS/PAH)₁₀ film (c) before and (d) after TCEP treatment (5 mM, 30 min).

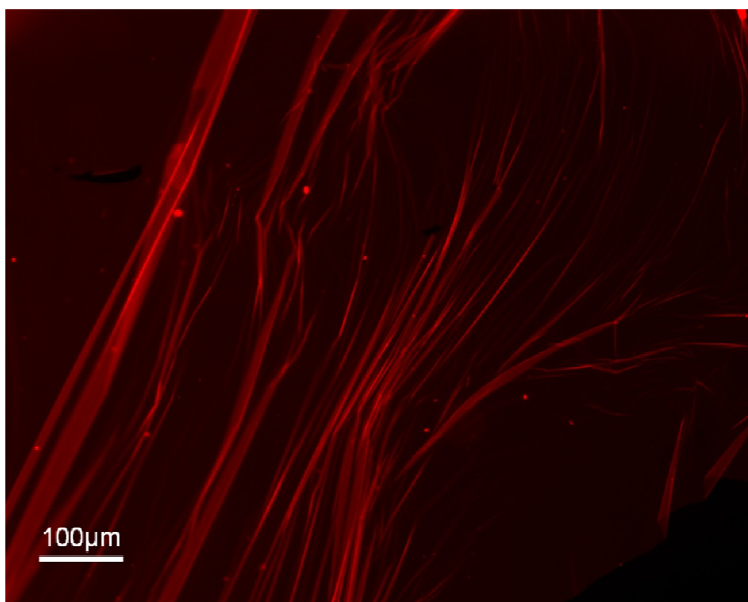


Figure S-4: Fluorescence microscopy image of a $(\text{PVBANH}_3^+ / \text{PVBACOO}^-)_{10}-(\text{PAH/PSS-Rodhamine})_{10}$ -PAH film after its detachment by TCEP treatment.

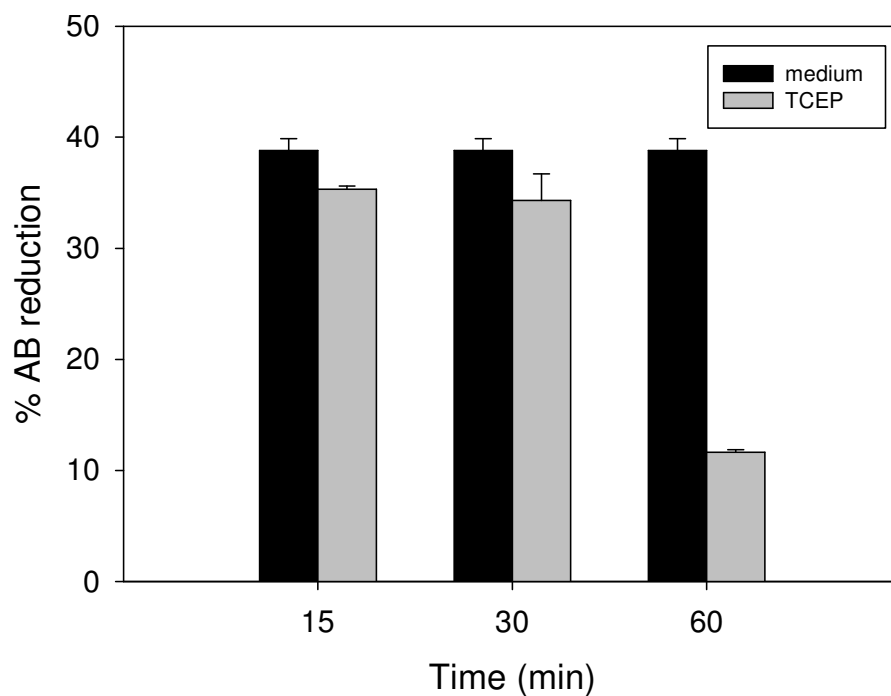


Figure S-5 Viability of HGFs in contact with 5 mM TCEP and culture medium obtained by Alamar Blue™ test. HGF cells were previously cultured during 7 days on glass substrate and incubated with 1 mL of TCEP solution or culture medium during 60 min.

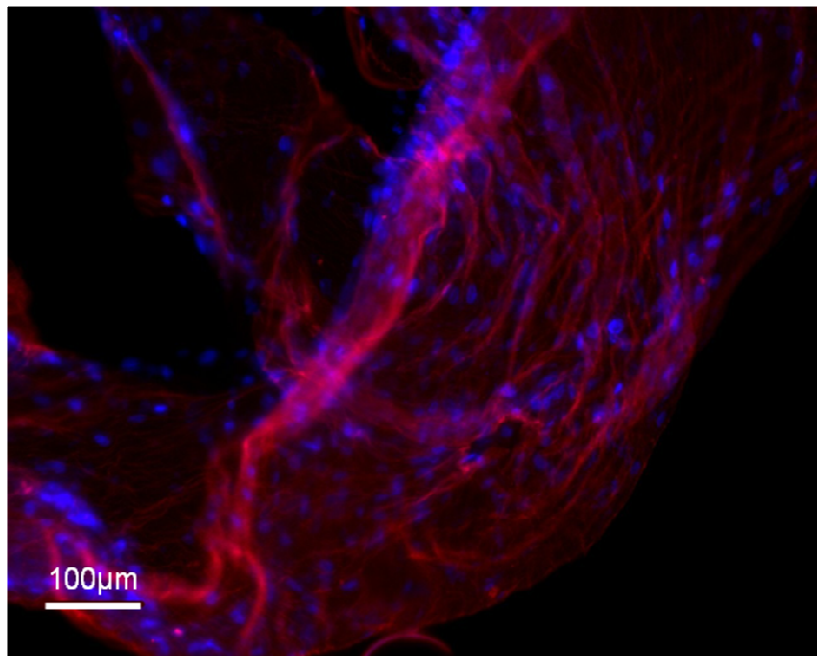


Figure S-6: Image of a HGFs sheet, with blue counterstaining of cells nuclei, recovered after 30 days of culture on $(\text{PVBANH}_3^+/\text{PVBACOO-})_{10}\text{-(PAH/PSS-Rodhamine)}_{10}\text{-PAH}$ film and its detachment by TCEP treatment.