Electronic Supplementary Material (ESI) for Biomaterials Science.

Electronic Supplementary Information for

Surface modulation of the integrated stiffness via layer-by-layer assembly as a facile strategy for selective cell adhesion

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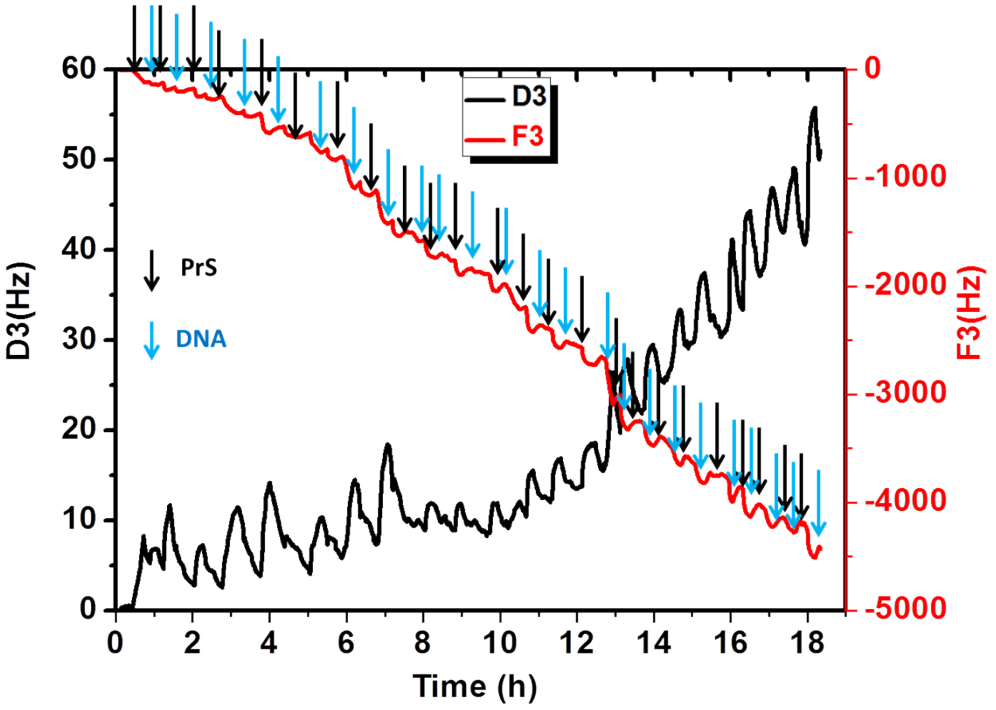

Fig. S1 The frequency shift (red line) and dissipation shift (blue line) of PrS/DNA multilayer films determined by QCM-D in liquid state.

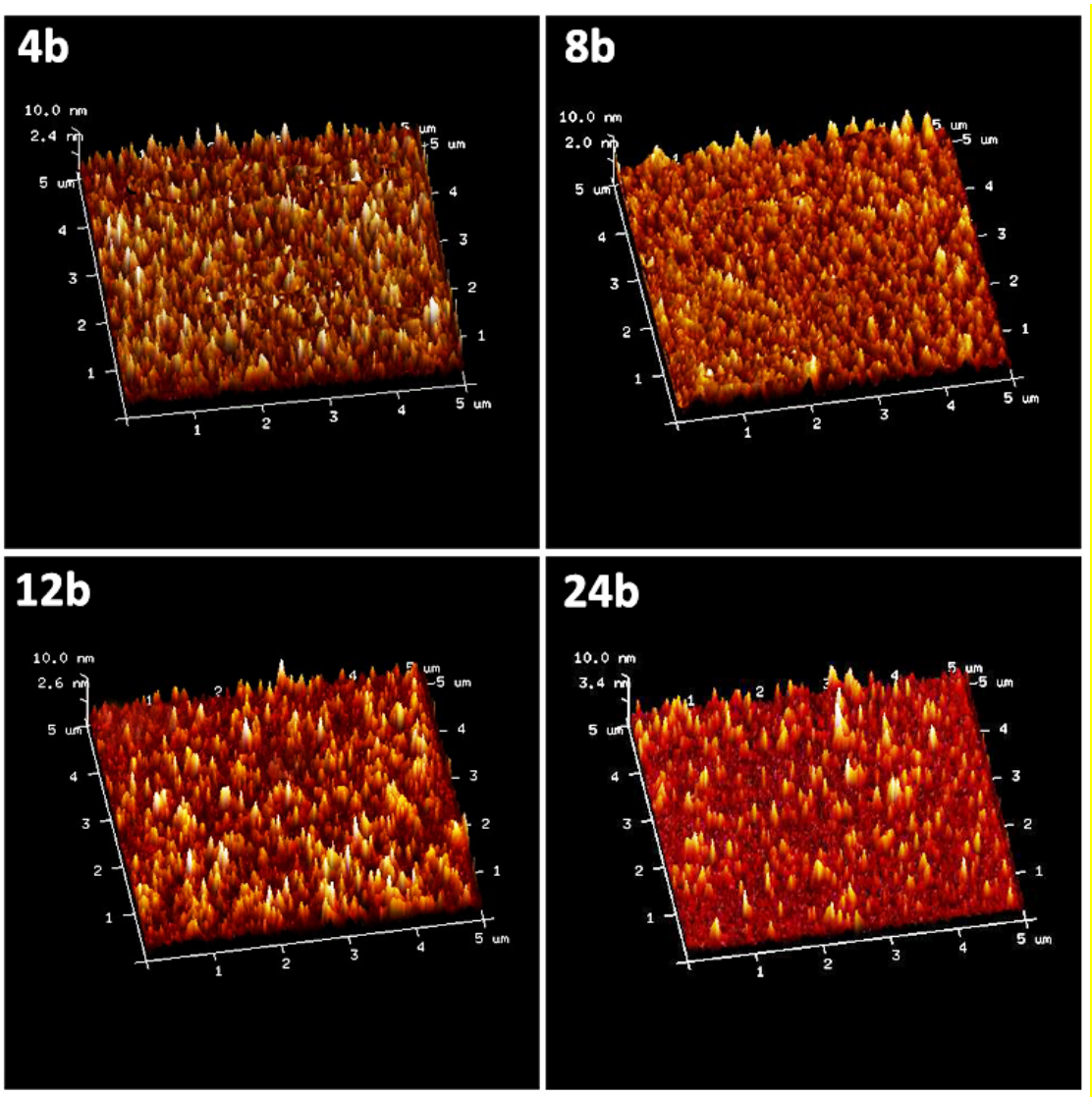

Fig. S2 The characteristics of 4, 8, 12 and 24 bilayers PrS/DNA multilayer films. Film's topography as observed by AFM imaging

Table S1. The mean roughness of PrS/DNA films analyzed from AFM images

	4b	**8b**	**12b**	**24b**
Mean roughness (nm)	**1.2±0.3**	**1.3±0.2**	**1.2±0.1**	**1.1±0.1**

N=3 parallel samples per each group

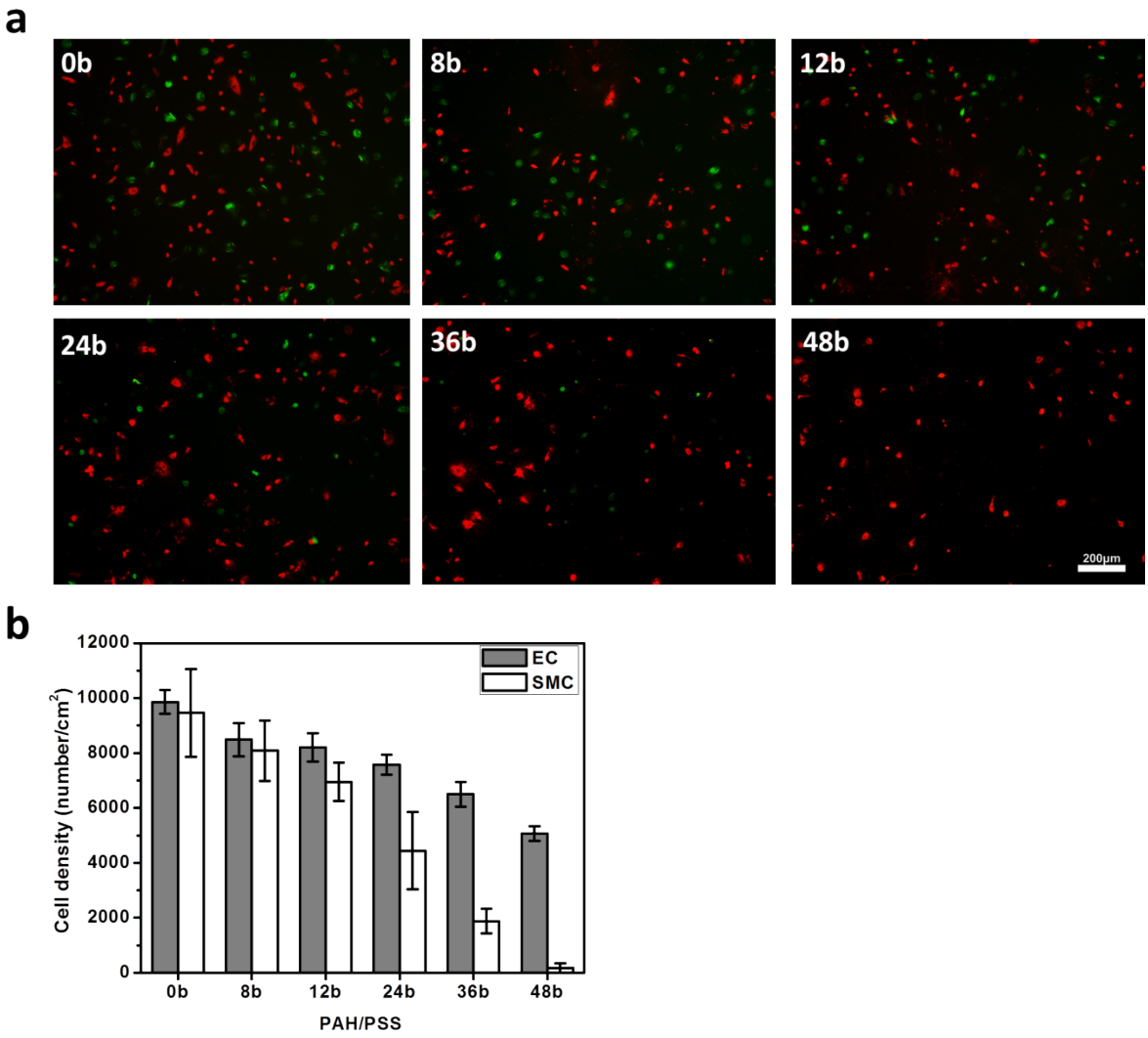

Fig. S3 The selective EC adhesion on PAH/PSS multilayer films. Immunofluorescence images of EC (stained by anti-vWf, red) and SMC (stained by anti-calponin, green) in coculture after 4h adhesion on PAH/PSS multilayer films with 0, 8, 12, 24 and 48 bilayers fabricated on glass substrate (a). The density of adherent EC and SMC in coculture (b). N=5 parallel samples per each group. Data are representative of three independent experiments. The scale bar is 200μm.

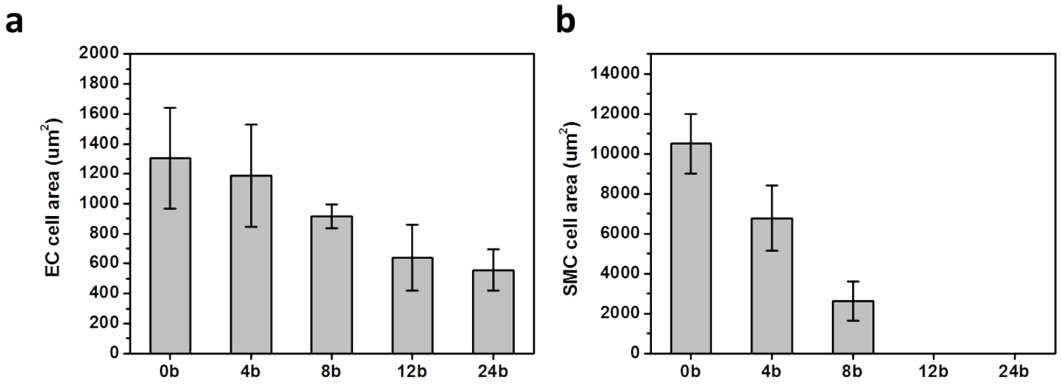

Fig. S4 Cell spreading area of EC (a) and SMC (b) adhesion on the PrS/DNA multilayer films with 0, 4, 8, 12 and 24 bilayers fabricated on glass substrate. N=5 parallel samples per each group. Data are representative of three independent experiments.

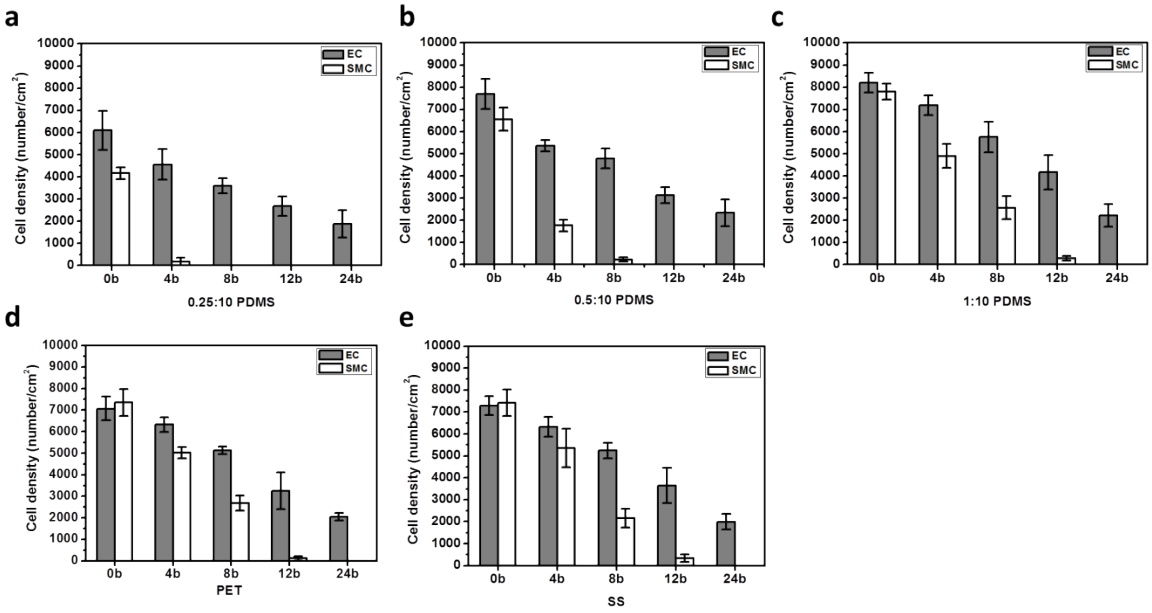

Fig. S5 The density of adherent EC and SMC in coculture after 4h adhesion on the 0, 4, 8, 12 and 24 bilayers PrS/DNA multilayer films fabricated on 0.25:10 PDMS (a), 0.5:10 PDMS (b), 1:10 PDMS (c), PET (d) and SS (e) substrates. N=5 parallel samples per each group. Data are representative of three independent experiments.