Electronic Supplementary Material (ESI) for Biomaterials Science

Blending PEG-based polymers and their use in surface micro-patterning by the FIMIC method to obtain topographically smooth patterns of elasticity

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Supplementary Information

1) Atomic Force Microscopy and Spectroscopy (Force Mapping)

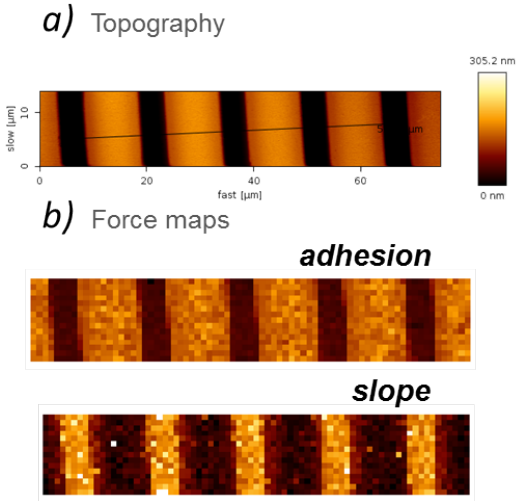

Figure S1 - Atomic force microscopy measurements of FIMICs made from the PEG1/3BC1 blend; in the dry state: a) the topographic image (same as in Figure 7a of the manuscript) is shown for comparison with the force maps shown here in b).

2) Cell adhesion to the patterns of elasticity

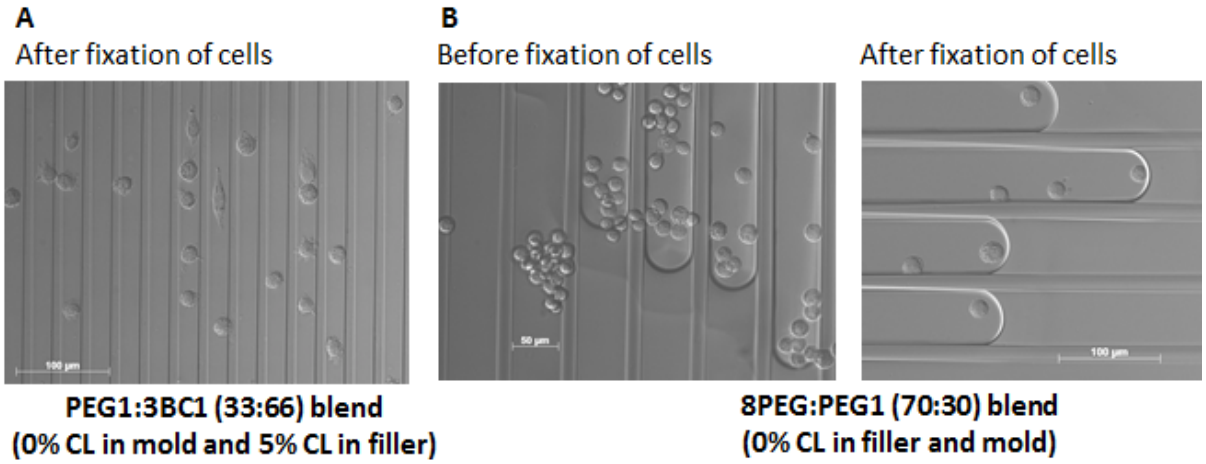

Figure S2 – A) Cells shown to spread and adhere to a FIMIC sample containing **PEG1**:**3BC1** (33:66) (0% CL in mold and 5% CL in filler). ***B)*** Cells shown ***not*** to adhere to a FIMIC sample containing **8PEG**:**3BC**1 (70:30) (0% CL in mold and filler); the cells are ”swimming” over the surface. Fixation of cells and subsequent washing off of the non-adherent cells reveals that cells do however adhere within the grooves that are unfilled (beyond the edge to where the filler reached during the capillary filling); this is attributed to the topography, which has been observed to aid cell adhesion to PEG-gels.